

**ORDINANCE NO. 535**

**AN ORDINANCE APPROVING A SPECIFIC USE PERMIT FOR THE USE “FOOD AND BEVERAGE SERVICES (WITH DRIVE-THROUGH)” WITHIN THE NEIGHBORHOOD MIXED-USE ZONING (MU-N) DISTRICT FOR THE PROPERTY LOCATED AT 14211 WEST STATE HIGHWAY 71, BEE CAVE, TEXAS; DESCRIBED AS LOT 1 OF THE 0.997 ACRES W HWY 71 COMMERCIAL TRACT RECORDED IN DOCUMENT NO. 202300149, OPRTC; PROVIDING FOR CERTAIN CONDITIONS; PROVIDING FOR PENALTY OF A FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; PROVIDING FOR FINDINGS OF FACT, SEVERABILITY, EFFECTIVE DATE AND PROPER NOTICE AND MEETING**

**WHEREAS**, an application has been submitted for a specific use permit for the use “Food and Beverage Services (with drive-through) within the Neighborhood Mixed-Use Zoning district for a 0.997-acre lot described as Lot 1 of the 0.997 Acres W Hwy 71 Commercial Tract, as recorded in Document No. 202300149, OPRTC, and which property is located at 14911 W State Highway 71, Bee Cave, Texas (the “Property”); and

**WHEREAS**, the use of the property for a “Food and Beverage Service (with drive-through) is a specific use permit in the Neighborhood Mixed-Use (MU-N) zoning district; and

**WHEREAS**, the property owner has submitted a Site Plan depicting the proposed use of the Property as Food and Beverage Services (with drive-through) and the terms and conditions of this Ordinance are sufficient to make this proposed use compatible with other Neighborhood Mixed-Use districts and adjacent property uses in the vicinity; and

**WHEREAS**, the notice as required by the City’s Zoning Ordinance has been published in the official newspaper and given to adjacent property owners; and

**WHEREAS**, the Planning and Zoning Commission and the City Council has each conducted Public Hearings on the Application for a Specific Use Permit wherein public comment was received and considered on the Application; and

**WHEREAS**, the City Council finds that the use of the Property as depicted in the Site Plan, Exhibit “A”, and in accordance with this Ordinance as Food and Beverage Services (with drive-through) is an appropriate use for the Property.

**NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BEE CAVE, TEXAS:**

**SECTION 1.** Findings of Fact. All of the above premises are hereby found to be true and correct legislative and factual findings of the City and are hereby approved and

incorporated into the body of this Ordinance as if copied in their entirety.

**SECTION 2.** The City Council finds that the information submitted in the Application for a Specific Use Permit submitted by Applicant meets the requirements of the City of Bee Cave Unified Development Code for the Property and depicted on the Site Plan attached hereto and incorporated herein as Exhibit “A”.

**SECTION 3. Uses.** A Specific Use Permit is hereby granted, subject to the conditions listed in Section 5 herein described, to authorize Food and Beverage Services (with drive-through) uses on the Property as depicted in Exhibit “A” and in conjunction with any other permitted uses authorized in the Neighborhood Mixed-Use Zoning district.

**SECTION 4. Site Plan.** The Site Plan attached hereto as Exhibit “A” depicting the Food and Beverage Services (with drive-through) uses are all hereby approved contingent upon the property owner meeting the conditions contained within Section 5.

**SECTION 5. Specific Use Permit.** The City Council hereby approves a Specific Use Permit to the property upon the following terms and conditions:

1. The Property Owner shall not commence development until all necessary permits and approvals are obtained as required by the City of Bee Cave Ordinances.
2. The Specific Use Permit authorizes development of the subject Property only as represented in the Site Plan described in Exhibit “A,” attached hereto, and only to the extent authorized herein. If portions of the development of the subject Property requested are not depicted in Exhibit “A”, then that portion of development is specifically denied.
3. Any amendments to the Exhibit “A” that involve any of the following will result in a new Specific Use Permit (SUP) being submitted:
  - a. An increase in impervious coverage
  - b. A change in traffic flow or a change to the drive-through queuing plan
  - c. Alterations to the drive-through function or emergency lane function
  - d. Any new waiver requests
4. The queuing plan submitted as Exhibit “B” is approved as part of the Specific Use Permit.
5. Due to the close proximity of the Refuse area to the Drive-through queuing lane, the applicant has agreed that Texas Disposal Systems will service the area after the peak hours, or during designated non-peak hours, which are defined as after 10:00 AM on each service day. Should there be any changes to these service hours that

affect the drive-through queuing process, the applicant will be obligated to submit an amended site plan and queuing plan for review.

6. The emergency lane must remain exclusively designated for emergency use and cannot be repurposed for restaurant services or other non-emergency uses.

**SECTION 6.** Penalty. That any person, firm or corporation violating any of the provisions of this Ordinance or the Unified Development Code, of the Code of Ordinances, as amended hereby, shall be deemed guilty of a misdemeanor and, upon conviction in the municipal court of the City of Bee Cave, Texas, shall be punished by a fine not to exceed the sum of two thousand dollars (\$2,000.00) for each offense, and each and every day of any such violation shall be deemed to constitute a separate offense, in accordance with Section 1.1.14 of the City’s Unified Development Code.

**SECTION 7.** Severability. Should any sentence, paragraph, subdivision, clause, phrase, or section of this Ordinance be adjusted or held to be unconstitutional, illegal, or invalid, the same shall not affect the validity of this Ordinance in whole or any part or provision thereof, other than the part so declared to be invalid, illegal or unconstitutional, and shall not affect the validity of the City’s Zoning Ordinance or Map as a whole.

**SECTION 8.** Proper Notice and Meeting. It is hereby officially found and determined that the meeting at which this Ordinance was adopted was open to the public and that public notice of the time, place and purpose of said meeting was given as required by the Open Meetings Act, Chapter 551 of the Texas Government Code.

**SECTION 9.** Effective Date. This Ordinance shall take effect immediately from and after its passage and publication as required by law.

PASSED AND APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

APPROVED:

\_\_\_\_\_  
Kara King, Mayor  
City of Bee Cave

ATTEST:

\_\_\_\_\_

Jo Ann Touchstone, City Secretary  
City of Bee Cave, Texas

[SEAL]

APPROVED AS TO FORM:

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City Attorney  
Ryan Henry, Law Offices of Ryan Henry, PLLC

**EXHIBIT “A”**  
**SITE PLAN**

PROJECT CONTACTS

Table with project contacts including Owner (Bee Cave Holdings, LLC), Engineer (Miller Gray, LLC), Surveyor (SurvTex LLC), Structural Engineer (ATS Engineers, Inspectors and Surveyors), Developer (Investcor Development), Architect (Enviroplan Architects & Planners), Landscape Architect (Hitchcock Design Group), and Lighting Designer (Spectrum Lighting).

ZONING/USE

Table with zoning information: Jurisdiction (Bee Cave), Zoning (Neighborhood Mixed-Use District), Land Use (Commercial), Acreage (0.997), Total Impervious Cover (19,560 SF (45%)), Building Impervious Cover (2344 SF (5%)), and Travis County Tax ID Tract # (0118770419).

LEGAL DESCRIPTION

LOT 1 BLK A OF THE MINOR PLAT OF 0.997 ACRES .564 AC RECORDED IN DOCUMENT 202300149, TRAVIS COUNTY, TEXAS

FUTURE LAND USE

RETAIL COFFEE SHOP

SURVEY

TOPOGRAPHY SURVEY PREPARED BY SURVTEX LLC, DATED 5/16/2022

BENCHMARK

BM1 MAG NAIL WITH ALUMINUM WASHER STAMPED "SURVTEX" ELEV: 940.14

WATERSHED

WATERSHED: LITTLE BARTON

EDWARDS AQUIFER

THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE AS DEFINED BY CITY OF TCEQ.

VARIANCE REQUESTS

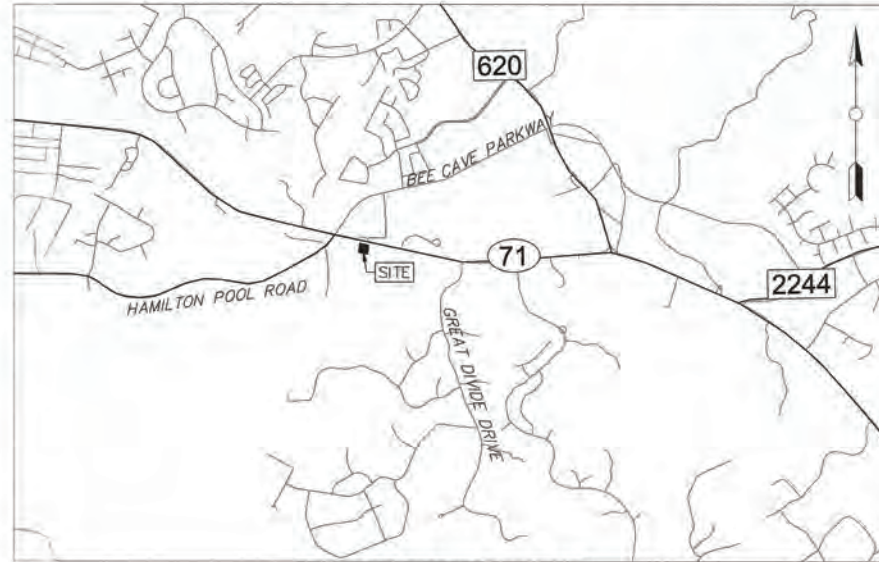
- 1. SECTION 7.3: USE OF PAVEMENT TYPE REQUIREMENTS

NOTES

NO PORTION OF THE SUBJECT PROPERTY IS WITHIN THE 100-YEAR FLOOD PLAIN AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) NO. 48453C0415J, TRAVIS COUNTY, TEXAS, DATED JANUARY 22, 2020. CONSTRUCTION HOURS ARE BETWEEN 7:00 AM TO 7:00 PM. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. THIS SITE IS SUBJECT TO A RESTRICTIVE COVENANT AND DRAINAGE EASEMENT RECORDED AS DOCUMENT NO. 202403935 WITH THE TRAVIS COUNTY OFFICE OF PUBLIC RECORDS.

Table with 4 columns: REVISION NO., DESCRIPTION, SHEETS REVISED, APPROVAL.

SITE DEVELOPMENT PLAN AND NPS POLLUTION CONTROL PLAN FOR STARBUCKS BEE CAVE 14211 STATE HWY 71 BEE CAVE, TEXAS 78738



SITE LOCATION MAP - 1" = 2000'
WTCPUA 71 WATER SYSTEM GRID: I-10
PRESSURE PLANE - 1280 HGL
WTCPUA WASTEWATER SYSTEM GRID: D-5
MAPSCO: 549R & 549V

OFFICIAL DATE OF SUBMISSION: 7/26/23

SUBMITTED BY:

Signature of J. Travis Wilson, P.E. dated 3/15/2024.

MillerGRAY

Consulting • Engineering • Infrastructure
TBPELS FIRM REG NO. F-16302

I, J. TRAVIS WILSON, P.E., CERTIFY THAT THESE ENGINEERING DOCUMENTS ARE COMPLETE, ACCURATE AND ADEQUATE FOR THE INTENDED PURPOSES, INCLUDING CONSTRUCTION BUT ARE NOT AUTHORIZED FOR CONSTRUCTION PRIOR TO FORMAL APPROVAL BY THE CITY OF BEE CAVE.

RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF HIS/HER SUBMITTAL WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

TRAVIS COUNTY ESD NO. 6

Table with 2 columns: DESIGN STANDARDS, 2015 IFC WITH LOCAL AMENDMENTS. Rows include Construction Classification (VB), Occupancy Classification (A-2), Building Area (2,344 SF), Building Height (23'-0"), Building Height in Stories (1), High-Rise (NO), Automatic Fire Sprinkler System (NO), Required Fire Flow @ 20 PSI (1,500 GPM), and Available Fire Flow @ 20 PSI (1,500 GPM).

SHEET INDEX

Table with 2 columns: NO., TITLE. Lists sheets 1 through 21, including Cover Sheet, Final Plat Sheets, City of Bee Cave Notes, WTCPUA Notes, Existing Conditions and Demolition Plan, Detention Drainage Area Maps, Water Quality Drainage Area Maps, Erosion & Sedimentation Control Plan, Site & Dimension Control Plan, Fire Control Plan, Overall Grading & Storm Drain Plan, Detention Pond & Rain Garden Plan, Detention Pond & Rain Garden Sections, Utility Plan, WWL 'A' Plan & Profile, and Standard Details.

PUBLIC WATER & WASTEWATER IMPROVEMENTS - QUANTITIES

Table with 2 columns: NO., TITLE. Lists quantities for pipes, valves, encasement, water meters, reducers, cut-in-tees, gate valves, restraints, steel encasement, drop manholes, and fire hydrant assembly.

CITY OF BEE CAVE APPROVAL DATE

REVIEWED BY:

Tricia S, Tichenor-Altamirano, PE (Digitally signed by Tricia S. Tichenor-Altamirano, PE Date: 2024.03.26 18:39:16-0500)
WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY
LAKE TRAVIS FIRE AND RESCUE (Date: 4/1/2024)

23-786-SNPS

CITY OF BEE CAVE SITE AND NPS NUMBER

24-44653

TxDOT DRIVEWAY PERMIT NUMBER

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTCPUA) NOTES:

- 1. THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY IS THE RETAIL WATER AND WASTEWATER PROVIDER.
2. BUILDING 1: 1.5" METER NO. \_\_\_\_\_ FOR DOMESTIC PURPOSES ONLY.
3. WTCPUA DOES NOT GUARANTEE FIRE FLOW.
4. A WTCPUA REPRESENTATIVE MUST BE PRESENT AT THE TIME ON CONNECTION TO THE EXISTING SYSTEM.
5. ALL WATER AND WASTEWATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN WATER AND WASTEWATER CONSTRUCTION SPECIFICATIONS AND WITH MATERIALS FROM THE CURRENT APPROVED CITY OF AUSTIN STANDARD PRODUCTS LIST (SPL).
6. WATER FOR LANDSCAPE IRRIGATION WILL NOT BE PROVIDED BY WTCPUA.
NO. LUE'S FOR DOMESTIC WATER: 6
NO. LUE'S FOR WASTEWATER: 6



CAUTION! IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

MillerGRAY Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPELS FIRM REG. NO. F-16302



STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

COVER SHEET

REVISIONS / CORRECTIONS

PROJECT NUMBER: 00323-001
DATE: 3/15/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 1 OF 41

23-786-SNPS





**STARBUCKS BEE CAVE**  
 14211 STATE HWY 71, BEE CAVE, TEXAS 78738

**FINAL PLAT**  
**SHEET 2 OF 2**

REVISIONS/CORRECTIONS	
NO.	DESCRIPTION

PROJECT NUMBER 00323-001	DATE 4/5/2024	DESIGNED: KKE	CHECKED: JTW
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SHEET NO.  
3 of 41  
23-789-SNPS

**811**  
 Know what's below.  
 Call before you dig.  
 FOR CITY USE ONLY.

**CAUTION!**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

202300149

**MINOR PLAT OF  
 0.997 ACRES W HWY 71 COMMERCIAL TRACT**

**LEGAL DESCRIPTION:**  
 BEING A 0.997 ACRE TRACT OF LAND SITUATED IN THE HALL MEDLIN SURVEY NO. 523, ABSTRACT NO. 540, IN TRAVIS COUNTY, TEXAS, AND BEING ALL OF THAT CALLED 0.995 ACRE TRACT CONVEYED TO BEE CAVE HOLDINGS AS RECORDED IN DOCUMENT NUMBER 2022074511, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, SAID 0.997 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING AT A TYPED TYPE I MONUMENT (CONCRETE OBEOLISK) FOUND MARKING A POINT OF CURVATURE AT OR NEAR STATION 1399+38.6 IN THE SOUTH RIGHT-OF-WAY LINE OF S.H. 71;

THENCE NORTH 77°31'07" WEST, WITH SAID SOUTH RIGHT-OF-WAY LINE, AT A DISTANCE OF 1839.85 FEET, PASSING A TYPED TYPE I MONUMENT (CONCRETE OBEOLISK) FOUND LYING IN SAID SOUTH RIGHT-OF-WAY LINE, AS RECORDED IN VOL. 663, PG. 186 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, AND CONTINUING FOR A TOTAL DISTANCE OF 1038.44 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE COMMON NORTH CORNER OF SAID 0.995 ACRE TRACT AND OF LOT 1, BEE CAVE - LTYA 71 WEST ADDITION, A SUBDIVISION RECORDED IN VOL. 94, PG. 43 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS, SAID 1/2-INCH IRON ROD ALSO MARKING THE NORTHEAST CORNER AND POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT;

THENCE SOUTH 06°43'13" WEST, WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 1, AT A DISTANCE OF 186.33 FEET PASSING A 1/2-INCH IRON ROD FOUND MARKING THE COMMON WEST CORNER OF SAID LOT 1 AND LOT 3 OF SAID BEE CAVE - LTYA 71 WEST ADDITION, CONTINUING WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 3, FOR A TOTAL DISTANCE OF 208.62 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE EASTERLY NORTHEAST CORNER OF LOT 1, BLOCK A, OF BEE CAVE SQUARE, A SUBDIVISION RECORDED IN DOC. NO. 20090122, O.P.R.T.C.T., SAME BEING THE SOUTHWEST CORNER OF SAID 0.995 ACRE TRACT AND OF THE HEREIN DESCRIBED TRACT;

THENCE NORTH 77°32'11" WEST, DEPARTING FROM SAID LOT 3 WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 1, BLOCK A, FOR A DISTANCE OF 208.76 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE SOUTHWEST CORNER OF SAID 0.995 ACRE TRACT AND OF THE HEREIN DESCRIBED TRACT, SAME BEING AN ANGLE POINT IN THE EASTERLY LINE OF SAID LOT 1, BLOCK A;

THENCE NORTH 06°43'33" EAST, CONTINUING WITH SAID COMMON LINE FOR A DISTANCE OF 212.56 FEET TO A CALCULATED POINT FOR THE COMMON NORTH CORNER OF SAID 0.995 ACRE TRACT AND SAID LOT 1, BLOCK A, SAME BEING THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT AND LYING IN THE AFORESAID SOUTH RIGHT-OF-WAY LINE, FROM WHICH A 1/2-INCH IRON ROD FOUND LYING IN SAID COMMON LINE BEARS SOUTH 06°43'53" WEST, A DISTANCE OF 3.99 FEET FOR REFERENCE, ALSO FROM WHICH A 1/2-INCH IRON ROD FOUND BEARS NORTH 59°31'03" EAST A DISTANCE OF 0.25 FEET, FOR REFERENCE;

THENCE SOUTH 77°42'07" EAST, DEPARTING FROM SAID LOT 1, BLOCK A, WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID SOUTH RIGHT-OF-WAY LINE FOR A DISTANCE OF 51.94 FEET TO A "MAG" NAIL WITH AN ALUMINUM WASHER STAMPED "SURVITEX" SET MARKING AN ANGLE POINT IN SAID COMMON LINE;

THENCE SOUTH 77°31'07" EAST, CONTINUING WITH SAID COMMON LINE FOR A DISTANCE OF 151.30 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.997 ACRES OF LAND, MORE OR LESS.

**FLOODPLAIN CERTIFICATION**  
 NO PART OF THE SUBJECT PROPERTY LIES WITHIN A FLOODPLAIN OR FLOOD PRONE AREA OR A FLOOD WAY OF ANY BODY OF WATER PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY RATE MAP, COMMUNITY F.I.R.M. MAP PREPARED FOR TRAVIS COUNTY, DATED EFFECTIVE JANUARY 22, 2020, AS SHOWN ON COMMUNITY PANEL NO. 4845304154.

*Steven M. Minor* 6-27-23  
 STEVEN M. MINOR, P.E.  
 STATE OF TEXAS NO. 133778  
 8834 N. CAPITAL OF TX HWY, SUITE 140  
 AUSTIN, TEXAS 78759  
 (512) 452-0371



THE STATE OF TEXAS §  
 COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS THAT I, JOHN W. MCCOWN, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM AN ACTUAL ON-THE-GROUND SURVEY OF THE LAND SHOWN HEREON AND THAT THE SURVEY MONUMENTS SHOWN HEREON WERE SET UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION ORDINANCE OF THE CITY OF BEE CAVE, TEXAS.

*John W. McCown* 6-26-23  
 JOHN W. MCCOWN  
 600 W. WHITESTONE BLVD.  
 CEDAR PARK, TEXAS 78613  
 (512) 249-8875



**SURVITEX LLC**  
 PROFESSIONAL SURVEYING AND MAPPING SERVICES  
 600 W. Whitestone Blvd.  
 Cedar Park, Texas 78613  
 (512) 249-8875  
 TBPELS Firm No. 10084600

DRAWN BY: A. LOPEZ  
 CHECKED BY: J. MCCOWN  
 PROJ. NO.: 2022-0027  
 FILE NAME: 2022-0027\_PLAT.DWG  
 DATE: OCTOBER 17, 2022  
 SHEET: 2 OF 2

THE STATE OF TEXAS §  
 COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS THAT WE, BEE CAVE HOLDINGS, LLC, OWNERS OF A CALLED 0.995 ACRES OF LAND OUT OF THE HALL MEDLIN SURVEY NO. 523, ABSTRACT 540 IN TRAVIS COUNTY, TEXAS RECORDED IN DOCUMENT NUMBER 2022074511, O.P.R.T.C.T. DO HEREBY ADOPT THIS MINOR PLAT AS SHOWN HEREON TO BE KNOWN AS "0.997 ACRES W HWY 71 COMMERCIAL TRACT" AND DO DEDICATE TO THE PUBLIC THE USE ALL NON-WANTED STREETS AND EASEMENTS SHOWN HEREON.

WITNESS MY HAND, THIS 27<sup>th</sup> DAY OF June, 2023 A.D.  
 BEE CAVE HOLDINGS, LLC

*Justin Hobson* 6/27/2023  
 JUSTIN HOBSON  
 BEE CAVE HOLDINGS, LLC  
 3001 RR 820 S, SUITE # 324  
 AUSTIN, TX, 78738  
 512-750-7272

THE STATE OF TEXAS §  
 COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED JUSTIN HOBSON OF BEE CAVE HOLDINGS, LLC, AS OWNER KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SWORN AND SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATION HEREIN EXPRESSED AND IN THE CAPACITIES THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 27<sup>th</sup> DAY OF June, 2023 A.D.

*Holly Kenemer* 6/27/2023  
 HOLLY KENEMER  
 NOTARY PUBLIC  
 STATE OF TEXAS  
 ID # 1197803-2  
 My Comm. Expires 05-22-2024

BY: FIRST UNITED BANK & TRUST COMPANY, BENEFICIARY  
*Marla Salerno* 6/27/23  
 MARLA SALERNO  
 FIRST UNITED BANK & TRUST COMPANY, BENEFICIARY  
 1517 CENTRE PLACE DRIVE, STE 100  
 DENTON, TX 76205  
 940-349-5661

THE STATE OF TEXAS §  
 COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED MARLA SALERNO OF THE FIRST UNITED BANK & TRUST COMPANY, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SWORN AND SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT SHE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATION HEREIN EXPRESSED AND IN THE CAPACITIES THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 27<sup>th</sup> DAY OF June, 2023 A.D.

*Holly Kenemer* 6/27/2023  
 HOLLY KENEMER  
 NOTARY PUBLIC  
 STATE OF TEXAS  
 ID # 1197803-2  
 My Comm. Expires 05-22-2024

CITY CERTIFICATIONS:  
 I, THE UNDERSIGNED PLANNING & DEVELOPMENT DIRECTOR OF THE CITY OF BEE CAVE, HEREBY CERTIFY THAT THIS SUBDIVISION PLAT CONFORMS TO ALL REQUIREMENTS OF THE SUBDIVISION REGULATION OF THIS CITY AND IS HEREBY AUTHORIZED AND APPROVED FOR RECORDING IN THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS.

*E. Eleanora Wier* 6/27/23  
 E. ELEANORA WIER  
 PLANNING & DEVELOPMENT DIRECTOR  
 DATE

THE STATE OF TEXAS §  
 COUNTY OF TRAVIS §

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING AND ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE 29<sup>th</sup> DAY OF June, 2023, AT 5:11 O'CLOCK P.M., AND DULY RECORDED ON THE 29<sup>th</sup> DAY OF June, 2023, A.D. AT 1:11 O'CLOCK P.M., OFFICIAL PUBLIC RECORDS OF SAID COUNTY AND STATE IN DOCUMENT NO. 202300149.

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THIS 29<sup>th</sup> DAY OF June, 2023, A.D.  
 DYANA LIMON-MERCADO,  
 COUNTY CLERK, TRAVIS COUNTY, TEXAS.

*Kimberly Johnson*  
 BY: DEPUTY  
 Kimberly Johnson

THE STATE OF TEXAS §  
 COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS THAT I, STEVEN M. MINOR, P.E. A LICENSED PROFESSIONAL ENGINEER, LICENSED BY THE STATE OF TEXAS, HEREBY CERTIFY THAT THE PROPER ENGINEERING CONSIDERATION HAVE BEEN GIVEN TO THIS PLAT AND IT MEETS THE REQUIREMENTS OF THE SUBDIVISION ORDINANCE OF THE CITY OF BEE CAVE, TEXAS.

*Steven M. Minor* 6-27-23  
 STEVEN M. MINOR, P.E.  
 STATE OF TEXAS NO. 133778  
 8834 N. CAPITAL OF TX HWY, SUITE 140  
 AUSTIN, TEXAS 78759  
 (512) 452-0371



- NOTES:
- THIS SUBDIVISION IS LOCATED WITHIN THE CITY LIMITS OF BEE CAVE AND IS SUBJECT TO APPLICABLE CITY OF BEE CAVE ORDINANCES.
  - THIS SUBDIVISION IS LOCATED WITHIN THE LITTLE BARTON CREEK WATERSHED.
  - THIS SUBDIVISION IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE.
  - ELECTRIC SERVICE WILL BE PROVIDED TO THE SUBDIVISION BY AUSTIN ENERGY.
  - AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY, AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH THE LAND DEVELOPMENT CODE AND THE CITY OF BEE CAVE OAK WILT REGULATIONS.
  - THE OWNERS OF THIS SUBDIVISION SHALL PROVIDE AUSTIN ENERGY WITH AN EASEMENT AND/OR ACCESS REQUIRED IN ADDITION TO THOSE INDICATED, EXCLUSIVELY FOR THE INSTALLMENT AND ONGOING MAINTENANCE OF FACILITIES FOR IMPROVEMENTS TO THIS SUBDIVISION AND FOR NO OTHER PURPOSE. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRICAL SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH THE SUBDIVISION BY AUSTIN ENERGY.
  - THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
  - THE OWNER OF THE PROPERTY OR HIS/HER ASSIGNS IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRICAL SAFETY CODE, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, AUSTIN ENERGY RULES AND REGULATIONS AND STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICES UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
  - WATER AND WASTEWATER WILL BE PROVIDED BY VEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (VTC PUA).
  - NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO AN APPROVED PUBLIC WATER AND WASTEWATER SYSTEM.
  - A SIXTEEN FOOT (16') WIDE PUBLIC UTILITY EASEMENT (P.U.E.) IS DEDICATED FOR USE FOR PUBLIC UTILITIES ADJACENT TO ALL STREET SIDE PROPERTY LINES OF ALL LOTS SHOWN ON THIS PLAT.
  - THE WATER SYSTEM FOR THIS SUBDIVISION SHALL BE DESIGNED TO SUPPLY THE FIRE FLOWS AS REQUIRED BY ORDINANCE 2010-1 ENACTED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6. PLANS SHALL BE REVIEWED AND APPROVED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 FOR CONSTRUCTION OF THE SUBDIVISION IMPROVEMENTS AND SITE DEVELOPMENT OF ALL LOTS, EXCEPT SINGLE FAMILY.
  - IN APPROVING THIS PLAT, THE CITY OF BEE CAVE, TEXAS ASSUMES NO OBLIGATION TO BUILD STREETS OR ROADS SHOWN ON THIS PLAT OR BUILD ANY BRIDGES, CULVERTS OR DRAINAGE STRUCTURES IN CONNECTION THEREWITH, OR PROVIDE ANY TRAFFIC CONTROL DEVICES OR SIGNS IN CONNECTION THEREWITH. THE BUILDING OF ALL STREETS OR ROADS SHOWN ON THIS PLAT, AND ALL BRIDGES, CULVERTS, DRAINAGE STRUCTURES CONSTRUCTED OR IN PLACE IN SUCH STREETS OR ROADS OR IN CONNECTION THEREWITH IS THE RESPONSIBILITY OF THE OWNER AND/OR DEVELOPER OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THE CITY OF BEE CAVE, TEXAS.
  - THE PROPERTY HAS ACCESS TO AND FROM A DEDICATED PUBLIC ROADWAY.
  - DRAINAGE AND WATER QUALITY EASEMENTS ARE FOR THE PROTECTION OF THE ENVIRONMENT BY IMPROVING THE QUALITY OF STORM WATER RUNOFF FROM DEVELOPED LANDS, THE NATIVE LAND OR MANAGEMENT PRACTICES WITHIN THESE EASEMENTS ARE TO HELP MAINTAIN CLEAN WATER IN CREEKS, RIVERS, AND LAKES. NO STRUCTURE OR IMPROVEMENTS, OTHER THAN NATIVE PLANT ENHANCEMENTS, OR WATER QUALITY CONTROL IMPROVEMENTS IN ACCORDANCE WITH THE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THE SUBDIVISION, OR MAINTENANCE TO THE AREAS IN ACCORDANCE WITH THE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THE SUBDIVISION MAY BE PLACED OR PERFORMED WITHIN THESE EASEMENTS WITHOUT PRIOR AUTHORIZATION AND APPROVAL IN WRITING FROM THE CITY OF BEE CAVE. THESE EASEMENTS SHALL BE MAINTAINED BY THE OWNER OR ITS APPROVED ASSIGNS IN ACCORDANCE WITH THE MAINTENANCE PLAN OF THE NON-POINT SOURCE POLLUTION CONTROL PERMIT APPLICABLE TO THE LOT. THESE EASEMENTS MAY NOT BE AMENDED OR ALTERED EXCEPT BY EXPRESS WRITTEN AGREEMENT OF THE CITY, PROPERTY OWNER AND/OR HIS/HER ASSIGNS SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS/STORM SEWER EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY THE CITY OF BEE CAVE FOR INSPECTION OR MAINTENANCE OF SAID EASEMENTS.
  - DEVELOPMENT OF THIS PROPERTY SHALL NOT COMMENCE UNTIL A NON-POINT SOURCE POLLUTION CONTROL PERMIT AS REQUIRED BY THE CITY OF BEE CAVE, TEXAS HAS BEEN ISSUED BY THE CITY OF BEE CAVE, TEXAS.
  - ALL PROPERTY HEREIN IS SUBJECT TO THE CITY OF BEE CAVE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THIS SUBDIVISION. SHOULD THE CITY OF BEE CAVE CHANGE, ALTER, OR AMEND THE USE AS PERMITTED IN THE NON-POINT SOURCE POLLUTION CONTROL PERMIT, THEN AN AMENDED NON-SOURCE POLLUTION CONTROL PERMIT SHALL BE REQUIRED.
  - SELLING A PORTION OF THIS LAND BY METES AND BOUNDS IS A VIOLATION OF THE CITY OF BEE CAVE ORDINANCES AND STATE LAW, AND IS SUBJECT TO FINES AND THE WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
  - NO CONVEYANCE OR SALES OF ANY PORTION OR LOT OF THIS PROPERTY MAY OCCUR UNTIL AFTER THE FINAL PLAT IS RECORDED WITH THE CLERK OF TRAVIS COUNTY, TEXAS.
  - AN INTEGRATED PEST MANAGEMENT PLAN SHALL BE PROVIDED AT THE SITE AND NPS PLAN STATE TO THE CITY OF BEE CAVE.
  - THIS SUBDIVISION IS ZONED MIXED USE NEIGHBORHOOD.
  - ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF BEE CAVE SIGN ORDINANCE.
  - THE APPROVAL BY THE CITY OF BEE CAVE OF THIS PLAT SHALL NOT, IN AND OF ITSELF, BE DEEMED TO CONSTITUTE OR IMPLY THE ACCEPTANCE BY THE CITY OF ANY STREET, PUBLIC AREA, EASEMENT OR PARK SHOWN ON THE PLAT.
  - THE OWNER OF LOT 1 OF THE 0.997 ACRES W HWY 71 COMMERCIAL TRACT MINOR PLAT IS RESPONSIBLE FOR MAINTENANCE OF THE JOINT ACCESS EASEMENT.



**CITY OF BEE CAVE STANDARD CONSTRUCTION NOTES - ADOPTED JUNE 24, 2022**

**GENERAL NOTES**

- THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE TEXAS EXCAVATION SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED TO, CROSSED, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
- CONTACT THE AUTHORITY HAVING JURISDICTION (WTPCUA/WCID17) FOR EXISTING WATER AND WASTEWATER LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION.
- ANY CHANGES OR REVISIONS TO THESE PLANS MUST FIRST BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER FOR REVIEW AND WRITTEN APPROVAL PRIOR TO CONSTRUCTION OF THE REVISION. THE CITY ENGINEER MAY ALLOW FIELD ADJUSTMENTS WITHOUT FORMAL APPROVAL OF A CORRECTION, ON A CASE BY CASE BASIS, WITH THOSE CHANGES TO BE REFLECTED ON THE RECORD DRAWINGS
- A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO ANY PARTIAL OR COMPLETE ROADWAY CLOSURES. TRAFFIC CONTROL PLANS SHALL BE SITE SPECIFIC AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. LANE CLOSURES ON ARTERIALS AND ANY FULL ROAD CLOSURES REQUIRE MESSAGE BOARDS NOTIFYING THE PUBLIC ONE WEEK PRIOR TO THE CLOSURE.
- NO WORK IS TO BE PERFORMED BETWEEN THE HOURS OF 7:00 P.M. AND 7:00 A.M PER THE CITY'S NOISE ORDINANCE. REQUESTS FOR EXCEPTIONS TO THE NOISE ORDINANCE MUST BE MADE IN WRITING TO THE CITY MANAGER.
- CONTACT THE CITY ENGINEERING STAFF (512-767-6675) AT LEAST 4 DAYS PRIOR TO WORK TO SCHEDULE ANY INSPECTIONS ON WEEKENDS OR CITY HOLIDAYS.
- NO STREET LIGHTS OR SIGNS OF ANY KIND ARE TO BE PLACED WITHIN ANY SIDEWALKS.
- NO BLASTING IS ALLOWED.
- ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL GIVE THE CITY OF BEE CAVE 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. CONTACT THE PLANNING & DEVELOPMENT DEPARTMENT AT 512-767-6675.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND THE CITY OF BEE CAVE REPRESENTATIVES PRIOR TO INSTALLATION OF EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTION MEASURES AND PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE CITY OF BEE CAVE ENGINEERING STAFF AT LEAST THREE (3) DAYS PRIOR TO THE MEETING DATE. FOR PROJECT IN THE ETJ, THE PRE-CONSTRUCTION MEETING MUST BE SCHEDULED THROUGH TRAVIS COUNTY AND COORDINATED WITH THE CITY TO CONDUCT A SIMULTANEOUS CITY/COUNTY PRE-CONSTRUCTION MEETING. THE APPLICANT IS RESPONSIBLE FOR COORDINATING/SCHEDULING ATTENDANCE OF REPRESENTATIVES FROM THE UTILITY AND FIRE AUTHORITY HAVING JURISDICTION.
- THE CONTRACTOR AND ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH THE CITY OF BEE CAVE
- ACCURATE "RECORD DRAWINGS" FOLLOWING THE COMPLETION OF ALL CONSTRUCTION. THESE "RECORD DRAWINGS" SHALL MEET THE SATISFACTION OF THE ENGINEERING DEPARTMENTS PRIOR TO FINAL ACCEPTANCE
- WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. PRIOR TO ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT EASEMENTS AND PROVIDE REVEGETATION IN ACCORDANCE WITH CITY STANDARDS. CLEANUP SHALL BE TO THE SATISFACTION OF THE ENGINEER.
- CONTRACTOR TO LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, CONTROL POINTS AND PROJECT ENGINEERING REFERENCE POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, AT NO ADDITIONAL COST TO OWNER.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. IN THE EVENT THAT A FENCE MUST BE REMOVED, THE CONTRACTOR SHALL REPLACE SAID FENCE OR PORTION THEREOF WITH THE SAME TYPE OF FENCING TO A QUALITY OF EQUAL OR BETTER THAN THE ORIGINAL FENCE.
- ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 1033 LA POSADA DR. SUITE 375, AUSTIN, TEXAS 78752-3832.
- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY COVERED IN THE PROJECT SPECIFICATIONS SHALL CONFORM TO ALL CITY OF AUSTIN DETAILS AND STANDARD SPECIFICATIONS IN ACCORDANCE WITH THE CITY OF BEE CAVE ENGINEERING TECHNICAL MANUAL.
- PROJECT SPECIFICATIONS TAKE PRECEDENCE OVER PLANS AND SPECIAL CONDITIONS GOVERN OVER TECHNICAL SPECIFICATIONS.
- HOT MIX ASPHALTIC CONCRETE PAVEMENT SHALL BE MINIMUM THICKNESS OF 2 INCHES WITH NO RECYCLED ASPHALT SHINGLES CONTENT.
- CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY RISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES GAS, WATER, WASTEWATER, ELECTRICAL, TELEPHONE, CABLE TV AND STREET DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER WITHIN TWENTY-FOUR (24) HOURS.
- THE CONTRACTOR MUST OBTAIN A CONSTRUCTION WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADS AND DRIVES ADJACENT TO AND NEAR THE SITE FREE FROM SOIL, SEDIMENT AND DEBRIS. CONTRACTOR WILL NOT REMOVE SOIL, SEDIMENT OR DEBRIS FROM ANY AREA OR VEHICLE BY MEANS OF WATER. ONLY SHOVELING AND SWEEPING WILL BE ALLOWED. CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL FROM THE SITE.
- THE CITY OF BEE CAVE SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.

**CITY OF BEE CAVE STANDARD CONSTRUCTION NOTES - ADOPTED JUNE 24, 2022**

- AN ENGINEER'S CONCURRENCE LETTER AND RECORD DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER PRIOR TO CONDUCTING THE FINAL CITY INSPECTION. THE ENGINEER AND CONTRACTOR SHALL VERIFY THAT ALL FINAL REVISIONS AND CHANGES HAVE BEEN MADE TO THE DIGITAL COPY PRIOR TO CITY SUBMITTAL. RECORD CONSTRUCTION DRAWINGS, INCLUDING ROADWAY AND ALL UTILITIES SHALL BE PROVIDED TO THE CITY IN DIGITAL FORMAT AS AUTOCAD ".DWG" FILES, MICROSTATION ".DGN" FILES OR ESRI ".SHP" FILES. LINE WEIGHTS, LINE TYPES AND TEXT SIZE SHALL BE SUCH THAT IF HALF-SIZE PRINTS (11"x17") WERE PRODUCED, THE PLANS WOULD STILL BE LEGIBLE. ALL REQUIRED DIGITAL FILES SHALL CONTAIN A MINIMUM OF TWO CONTROL POINTS REFERENCED TO THE STATE PLANE GRID COORDINATE SYSTEM - TEXAS CENTRAL ZONE (4203), IN US SURVEY FEET AND SHALL INCLUDE ROTATION INFORMATION AND SCALE FACTOR REQUIRED TO REDUCE SURFACE COORDINATES TO GRID COORDINATES IN US SURVEY FEET

**STREET AND DRAINAGE NOTES**

- ALL SIDEWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY OF BEE CAVE HAS NOT REVIEWED THESE PLANS FOR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, OR ANY OTHER ACCESSIBILITY LEGISLATION, AND DOES NOT WARRANT OR APPROVE THESE PLANS FOR ANY ACCESSIBILITY STANDARDS.
- PRIOR TO ACCEPTANCE THE ENGINEER SHALL SUBMIT DOCUMENTATION THAT THE IMPROVEMENTS WERE INSPECTED BY TDLR OR A REGISTERED ACCESSIBILITY SPECIALIST (RAS) AND ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE TABA.
- CONTRACTOR SHALL PROVIDE QUALITY TESTING FOR ALL INFRASTRUCTURES TO BE ACCEPTED AND MAINTAINED BY THE CITY OF BEE CAVE AFTER COMPLETION. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT 512-7697-6675 NO LESS THAN 48 HOURS PRIOR TO ANY TESTING.
- BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 6" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR
- WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 6" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE
- A MINIMUM OF 6" OF TOPSOIL SHALL BE PLACED BETWEEN THE CURB AND RIGHT-OF-WAY AND IN ALL DRAINAGE CHANNELS EXCEPT CHANNELS CUT IN STABLE ROCK.
- DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, INCLUDING GAS, ELECTRIC TELEPHONE, CABLE TV, ETC., SHALL BE A MINIMUM OF 36" BELOW SUBGRADE.
- STREET RIGHT-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OFWAY AT 1/4" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY OF BEE CAVE ENGINEERING STAFF.
- BARRICADES BUILT TO THE CITY OF BEE CAVE STANDARDS SHALL BE ERECTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
- ALL REINFORCED CONCRETE PIPE SHALL BE MINIMUM CLASS III OF TONGUE AND GROOVE OR O-RING JOINT DESIGN.
- THE CONTRACTOR IS TO NOTIFY THE ENGINEERING STAFF 48 HOURS PRIOR TO THE FOLLOWING TESTING: PROOF ROLLING SUB-GRADE AND EVERY LIFT OF ROADWAY EMBANKMENT, IN-PLACE DENSITY TESTING OF EVERY BASE COURSE, AND ASPHALT CORES. ALL OF THIS TESTING MUST BE WITNESSED BY A CITY OF BEE CAVE REPRESENTATIVE UNLESS OTHERWISE INSTRUCTED BY THE CITY ENGINEER.
- THE CONTRACTOR MUST PROVIDE A PNEUMATIC TRUCK PER TXDOT SPEC FOR PROOF ROLLING.
- ALL STRIPING, WITH THE EXCEPTION OF STOP BARS, CROSS WALKS, WORDS AND ARROWS, IS TO BE TYPE II (WATER BASED). STOP BARS, CROSS WALKS, WORDS AND ARROWS REQUIRE TYPE I THERMOPLASTIC.
- MANHOLE FRAMES, COVERS, VALVES, CLEAN-OUTS, ETC. SHALL BE RAISED TO GRADE PRIOR TO FINAL PAVEMENT CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT LEAST 48 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET ROW.
- A STOP BAR SHALL BE PLACED AT ALL STOP SIGN LOCATIONS.
- A MINIMUM OF SEVEN DAYS OF CURE TIME IS REQUIRED FOR HMAc PRIOR TO THE INTRODUCTION OF PUBLIC VEHICULAR TRAFFIC TO ANY STREETS.
- THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISIONS OF THE CONSTRUCTION PLANS.
- GEOTECHNICAL INVESTIGATION INFORMATION AND PAVEMENT RECOMMENDATIONS WERE PROVIDED BY PSI GEOTECHNICAL (PSI PROJECT NO. 03031690). PAVEMENT RECOMMENDATIONS ARE AS FOLLOWS:

MATERIAL	OPTION 1		OPTION 2		
	TRAFFIC TYPE	LIGHT	HEAVY	LIGHT	HEAVY
PORTLAND CEMENT CONCRETE	5"		6 1/2"	5"	6 1/2"
LOW PI MATERIAL (PI<25)	-		-	-	-
LIME STABILIZED SUBGRADE		8"		-	-
COMPACTED SUBGRADE		-		8"	-

**TRENCH SAFETY NOTES**

- TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT ARE DESCRIBED IN ITEM 509S "TRENCH SAFETY SYSTEMS" OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND SHALL BE IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.

**GRADING NOTES**

- POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
- THE CONTRACTOR SHALL CONSTRUCT EARTHEN EMBANKMENTS WITH SLOPES NO STEEPER THAN 3:1 AND COMPACT SOIL TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
- AREAS OF SOIL DISTURBANCE ARE LIMITED TO GRADING AND IMPROVEMENTS SHOWN. ALL OTHER AREAS WILL NOT BE DISTURBED.

**BENCHMARK NOTES**

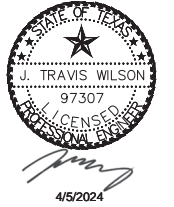
BM1 MAG NAIL WITH ALUMINUM WASHER STAMPED "SURVTEX"  
ELEV : 940.14

**APPENDIX E-3: ADOPTED JUNE 28, 2022**

**CITY OF BEE CAVE STANDARD SEQUENCE OF CONSTRUCTION**

- TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION, INITIATE TREE MITIGATION MEASURES AND CONDUCT "PRE - CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE).
- THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE PLANNING & DEVELOPMENT DEPARTMENT AT 512-767-6675, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRECONSTRUCTION MEETING.
- THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REVISED, IF NEEDED, TO COMPLY WITH CITY INSPECTORS' DIRECTIVES, AND REVISED CONSTRUCTION SCHEDULE RELATIVE TO THE WATER QUALITY PLAN REQUIREMENTS AND THE EROSION PLAN.
- ROUGH GRADE THE POND(S) AT 100% PROPOSED CAPACITY. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF EMBANKMENT OR EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. THE OUTLET SYSTEM SHALL BE PROTECTED FROM EROSION AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL INSTALLATION OF THE PERMANENT WATER QUALITY POND(S).
- TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.
- BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
- PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIOR TO/CONCURRENTLY WITH REVEGETATION OF SITE.
- COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
- UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE BEARING THE ENGINEER'S SEAL, SIGNATURE, AND DATE TO THE CITY ENGINEER INDICATING THAT CONSTRUCTION, INCLUDING REVEGETATION, IS COMPLETE AND IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY ENGINEERING STAFF.
- UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE CITY ENGINEER INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY ENGINEERING STAFF.
- AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY ENGINEER AND WITH APPROVAL FROM THE CITY ENGINEER, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WATER QUALITY PONDS OR CONTROLS.

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**STARBUCKS BEE CAVE**

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

**CITY OF BEE CAVE NOTES**  
1 OF 2

NO.	DATE	REVISIONS / CORRECTIONS	
		DESCRIPTION	BY

FOR CITY USE ONLY:

**CAUTION!**  
IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

PROJECT NUMBER 00323-001	DATE: 4/5/2024	DESIGNED: KKE	CHECKED: JTW
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**SHEET NO.**  
4 OF 41

**23-789-SNPS**

**APPENDIX E-1: ADOPTED JUNE 28, 2022  
CITY OF BEE CAVE EROSION CONTROL NOTES**

- THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
- THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE BEE CAVE ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR A TPDES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF BEE CAVE ENGINEERING STAFF AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE BASIC ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY BEE CAVE EV PLAN REVIEWERS AS WELL AS BEE CAVE EV INSPECTORS.
- THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF BEE CAVE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND BEE CAVE ENGINEERING STAFF AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE PLANNING & DEVELOPMENT DEPARTMENT, 512-767-6675, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. BEE CAVE APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY THE ENGINEERING STAFF AT THIS TIME.
- ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED BEE CAVE STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENGINEERING STAFF DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.
- THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC - IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER INSPECTOR (CESSWI OR CESSWI - IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION AND EROSION CONTROLS (CISEC OR CISEC - IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (½) INCH OR GREATER RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES OR ONE-THIRD (⅓) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.
- PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
- ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF BEE CAVE FOR FURTHER INVESTIGATION. IN ADDITION, IF THE PROJECT SITE IS LOCATED WITHIN THE EDWARDS AQUIFER, THE PROJECT MANAGER MUST NOTIFY THE TRAVIS COUNTY BALCONES CANYONLANDS CONSERVATION PRESERVE (BCCP) BY EMAIL AT BCCP@TRAVISCOUNTYTX.GOV. CONSTRUCTION ACTIVITIES WITHIN 50 FEET OF THE VOID MUST STOP.
- TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:
  - ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.
  - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 601S.

AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF CITY OF AUSTIN STANDARD SPECIFICATION 601S BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.

  - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:

**TEMPORARY VEGETATIVE STABILIZATION:**

- FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: (WESTERN WHEATGRASS ( PASCOPYRUM SMITHII ) AT 5.6 POUNDS PER ACRE, OATS ( AVENA SATIVA ) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN ( SECALE CEREALE ) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT UTILIZE ANNUAL RYEGRASS ( LOLIUM MULTIFLORUM ) OR PERENNIAL RYEGRASS ( LOLIUM PERENNE ). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.
- FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.
  - FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.
  - HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.
  - TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 18 INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.
  - WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATION 604S OR 609S

**APPENDIX E-1: ADOPTED JUNE 28, 2022  
CITY OF BEE CAVE EROSION CONTROL NOTES**

TABLE 1: HYDROMULCHING FOR TEMPORARY VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
100% OR ANY BLEND OF WOOD, CELLULOSE, STRAW, AND/OR COTTON PLANT MATERIAL (EXCEPT NO MULCH SHALL EXCEED 30% PAPER)	70% OR GREATER WOOD/STRAW 30% OR LESS PAPER OR NATURAL FIBERS	0-3 MONTHS	MODERATE SLOPES; FROM FLAT TO 3:1	1,500 TO 2,000 LBS PER ACRE

**PERMANENT VEGETATIVE STABILIZATION:**

- FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.
- FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.
  - FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF BEE CAVE ENGINEERING STAFF.
  - HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.
  - WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE, AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE WTCPUA/WCID NO. 17 AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.
  - PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.
  - WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF BEE CAVE UDC, ENVIRONMENTAL CRITERIA MANUAL, AND CITY OF AUSTIN ITEMS 604S AND 609S.

TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
BONDED FIBER MATRIX (BFM)	80% ORGANIC DEFIBRATED FIBERS			
10% TACKIFIER	6 MONTHS	ON SLOPES UP TO 2:1 AND EROSION SOIL CONDITIONS	2500 TO 4000 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)	
FIBER REINFORCED MATRIX (FRM)	65% ORGANIC DEFIBRATED FIBERS 25% REINFORCING FIBERS OR LESS 10% TACKIFIER	UP TO 12 MONTHS	ON SLOPES UP TO 1:1 AND EROSION SOIL CONDITIONS	3,000 TO 4,500 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)

**DEVELOPER INFORMATION:**

OWNER: INVESTCOR DEVELOPMENT  
 PHONE: (512) 750-7272  
 ADDRESS: 3001 RANCH ROAD 620, STE 324  
 AUSTIN, TX 78738

**OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:**

MILLER GRAY, LLC

**PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:**

CONTRACTOR

**PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:**

CONTRACTOR

THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT AT 974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.

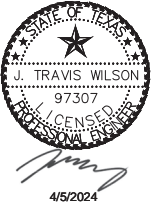
**APPENDIX E-2: ADOPTED JUNE 28, 2022  
CITY OF BEE CAVE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION**

- ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
- PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF BEE CAVE STANDARDS FOR TREE PROTECTION.
- PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
- EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIP LINES.
- PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE), FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:
  - SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
  - ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY;
  - WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
  - OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
- EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
  - WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED;
  - WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE);
  - WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEEN THE FENCE AND THE BUILDING;
  - WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITY AT 512-767-6675 TO DISCUSS ALTERNATIVES.

SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE PERMITTED.

- WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
- TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
- ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
- ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
- NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
- PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.).
- ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).
- DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

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 TBPE FIRM REG. NO. F-16302



**STARBUCKS BEE CAVE**  
 14211 STATE HWY 71, BEE CAVE, TEXAS 78738

**CITY OF BEE CAVE NOTES**  
 2 OF 2

REVISIONS / CORRECTIONS

NO.	DATE	DESCRIPTION	BY



**CAUTION!**

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER  
00323-001

DATE: 4/5/2024

DESIGNED: KKE

CHECKED: JTW

SHEET NO.  
5 of 41

23-789-SNPS

**SPOILS MANAGEMENT AND DISPOSAL NOTES (WTCPUA) - REVISED MAY 25, 2020**

1. TEMPORARY HOLDING SITES AS NECESSARY TO STOCKPILE EXCAVATED SOILS, EMBEDMENT MATERIAL, AND/OR PIPING AND APPURTENANCES MAY BE LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS.
2. NO PERMANENT SPOILS DISPOSAL SHALL BE ALLOWED ON-SITE, UNLESS APPROVED BY THE OWNER AND GOVERNING AUTHORITY.
3. ALL SPOILS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL DISPOSAL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE; AND SHALL NOTIFY THE OWNER AND/OR ENGINEER AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF ANY SPOILS MATERIAL.

**EROSION/ SEDIMENTATION CONTROL NOTES (WTCPUA)**

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

**STANDARD TREE PROTECTION NOTES (WTCPUA)**

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

**HOURS OF CONSTRUCTION (WTCPUA)  
REVISED MAY 25, 2020**

1. NO WORK SHALL BE DONE BETWEEN THE HOURS OF 8:00 P.M. AND 6:00 A.M.; NOR ON SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE WRITTEN PERMISSION OF THE WTCPUA IN EACH CASE, EXCEPT SUCH WORK AS MAY BE NECESSARY FOR THE PROPER CARE, MAINTENANCE AND PROTECTION OF THE WORK ALREADY DONE OR IN THE CASE OF AN EMERGENCY.

**LIMITS OF CONSTRUCTION NOTES (WTCPUA)  
REVISED MAY 25, 2020**

1. THE LIMITS OF CONSTRUCTION SHALL BE BOUNDED BY THE RIGHT OF WAY LINE OR PERMANENT/ TEMPORARY EASEMENT LIMITS SHOWN ON THE PLANS. LIMITS OF CONSTRUCTION MAY BE FURTHER RESTRICTED BY PLACEMENT OF SILT FENCE, TREE PROTECTION FENCING, OR OTHER APPURTENANCES AS SHOWN ON THE PLANS.
2. LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED BY THE CONTRACTOR BY INSTALLING SILT FENCE, ORANGE TENSAR FENCING (4 - FOOT ROLL TIED TO 6 FOOT POSTS SET AT 10 FOOT INTERVALS) OR OTHER BARRIERS AS APPROVED BY THE ENGINEER. ALL TEMPORARY BARRIERS SHALL BE REMOVED AT THE END OF THE PROJECT.
3. ANY AREAS OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED BY THE CONTRACTOR SHALL IMMEDIATELY BE RESTORED TO PRECONSTRUCTION CONDITION.

**SANITARY FACILITIES (WTCPUA) - REVISED MAY 25, 2020**

1. PROVISIONS SHALL BE MADE FOR NECESSARY SANITARY CONVENIENCES FOR THE USE OF LABORERS ON THE WORK. THE FACILITIES MUST BE PROPERLY SECLUDED FROM PUBLIC OBSERVATION AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR.

**PROTECTION OF BORE PITS (WTCPUA)  
REVISED MAY 25, 2020**

1. INSTALL BARRIER FENCING (TENSAR ORANGE FENCING OR CHAIN LINK FENCING) TO SURROUND THE BORE PITS. BARRIER FENCING SHALL REMAIN IN PLACE AT ALL TIMES WHILE THE BORE PIT IS OPEN. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY AND SAFETY AT THE BORE PITS.

**HORIZONTAL CONTROLS (WTCPUA)  
REVISED MAY 25, 2020**

1. ALL LINE WORK SHALL BE STAKED PRIOR TO CONSTRUCTION WITH SEALED CUT SHEETS PROVIDED TO THE WTCPUA INSPECTOR PRIOR TO CONSTRUCTION.

**CONSTRUCTION SEQUENCING**

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

**TRAFFIC CONTROL NOTES (WTCPUA) - REVISED MAY 25, 2020**

1. PLANS SHALL INDICATE RESPONSIBLE AGENT FOR TRAFFIC CONTROL (ENGINEER OR CONTRACTOR).
2. CONTRACTOR SHALL MAINTAIN REASONABLE LOCAL VEHICULAR TRAFFIC THROUGHOUT CONSTRUCTION OPERATIONS.
3. CONTRACTOR SHALL PROVIDE SIGNS, BARRICADES, FLAGGERS, AND OTHER MEASURES AS REQUIRED TO ALLOW FOR VEHICULAR AND PEDESTRIAN TRAFFIC TO PROCEED SAFELY WITH MINIMUM INCONVENIENCE.
4. SIGNS, BARRICADES, FLAGGERS, AND RELATED WORK SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WITH THE REQUIREMENTS OF THE GOVERNING CITY/COUNTY.
5. FOR ANY ACTIVITY WITHIN TXDOT RIGHT-OF-WAY, PROJECT MUST HAVE A TXDOT PERMIT. A COPY OF THE TXDOT PERMIT SHALL BE PROVIDED TO THE WTCPUA PRIOR TO CONSTRUCTION.

**SWPPP NOTES (WTCPUA)  
REVISED MAY 25, 2020**

THIS PROJECT IS SUBJECT TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES) GENERAL PERMIT TXR150000 FOR CONSTRUCTION ACTIVITIES. THE GENERAL PERMIT REQUIRES THE PREPARATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH HAS BEEN PROVIDED BY THE OWNER FOR USE BY THE CONTRACTOR. THE OWNER SHALL PROVIDE THE OWNER'S NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) TO THE TCEQ. THE CONTRACTOR'S RESPONSIBILITIES ARE AS FOLLOWS:

1. MAINTAIN A COPY OF THE SWPPP AND A SET OF CONSTRUCTION PLANS WITH THE TEMPORARY EROSION AND SEDIMENT CONTROL PLAN AT THE WORK SITE AT ALL TIMES.
2. FILE A NOTICE OF INTENT (NOI) AND APPLICABLE PAYMENT TO THE TCEQ AT LEAST 2 DAYS PRIOR TO SITE DISTURBANCE.
3. POST A COPY OF THE OWNER'S AND CONTRACTOR'S NOI FORMS AT THE WORK SITE.
4. SIGN THE CERTIFICATION AND OBTAIN A SIGNED CERTIFICATION STATEMENT FROM ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL MEASURES WHICH INDICATES THAT THE CONTRACTOR AND SUBCONTRACTOR UNDERSTANDS THE PERMIT REQUIREMENTS (FORMS ARE IN THE SWPPP)
5. FOLLOW AND COMPLY WITH ALL ASPECTS OF THE TPDES GENERAL PERMIT NO. TXR150000. THIS INCLUDES BUT IS NOT LIMITED TO FIELD INSPECTIONS AND REPORT, MAINTAINING AND REPAIRING EROSION CONTROLS AND UPDATING EROSION CONTROLS AND UPDATING EROSION CONTROL PLAN SHEETS BASED ON FIELD CHANGES AND MODIFICATIONS.
6. FILE A COPY OF THE CONTRACTOR'S NOTICE OF TERMINATION (NOT) WITH THE TCEQ ONCE THE WORK IS COMPLETED IN ACCORDANCE WITH THE TPDES GENERAL PERMIT NO TXR.150000 AND HAS BEEN ACCEPTED BY THE OWNER.

**WATER & WASTEWATER GENERAL CONSTRUCTION NOTES (WTCPUA)  
REVISED MAY 25, 2020**

1. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE STATE STATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.). COPIES OF O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AUSTIN AREA OFFICE - LA COSTA GREEN BLDG 1033, LA POSADA DR, SUITE 375, AUSTIN, TEXAS 78752-3832, 512-374-0271.
2. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND TO THE STATE LAW, (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436 ©) AND THE NEED FOR EFFECTIVE PRECAUTIONARY MEASURES WHEN OPERATING IN THE VICINITY OF ELECTRICAL LINES. THE CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY REQUIREMENTS, AND FOR COORDINATION OF ALL WORK WITH THE APPROPRIATE ELECTRIC UTILITY COMPANY.
3. THE CONTRACTOR SHALL CONTACT THE ONE-CALL BOARD OF TEXAS AT 811 OR 1-800-545-6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. THE LOCATION AND TYPE OF UTILITIES AND UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. IN ADDITIONAL TO NORMAL PRECAUTIONS WHEN EXCAVATING, USE EXTRA CAUTION WHEN EXCAVATING WITHIN 25 FEET OF ANY UTILITIES SHOWN ON THE PLANS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES ALL WATER, WASTEWATER, GAS, ELECTRICAL, TELEPHONE, CABLE TELEVISION, AND STREET AND DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER AND WTCPUA INSPECTOR WITHIN TWENTY-FOUR (24) HOURS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOIL MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL. NO SPOILS ARE TO REMAIN OVERNIGHT IN THE FLOODPLAIN.
6. NO BLASTING OR BURNING WILL BE ALLOWED.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, AT HIS EXPENSE, ALL UTILITIES, PAVEMENT, CURB, FENCES OR ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE CONSTRUCTION PLANS.
8. WHENEVER EXISTING UTILITIES, INDICATED OR NOT ON PLANS, PRESENT OBSTRUCTIONS TO GRADE AND/OR ALIGNMENT OF PROPOSED PIPE, CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER WHO WILL DETERMINE IF EXISTING IMPROVEMENTS ARE TO BE RELOCATED OR IF THE GRADE AND/OR ALIGNMENT OF PROPOSED PIPE IS TO BE CHANGED.
9. DUST PREVENTION SHALL BE PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE. DUST CONTROL SHALL INCLUDE SPRAYING OF WATER ON ALL DISTURBED AREAS, SPOIL PILES, OR HAUL MATERIALS ASSOCIATED WITH THE PROJECT OR OTHER METHODS APPROVED BY THE WTCPUA.
10. CLEANUP - UPON COMPLETION AND BEFORE MAKING APPLICATION FOR ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL CLEAN ALL STREETS AND ALL GROUND OCCUPIED BY HIM IN CONNECTION WITH THE WORK OF ALL RUBBISH, EXCESS MATERIALS, EXCESS EXCAVATED MATERIALS, TEMPORARY STRUCTURES AND EQUIPMENT. ALL PARTS OF THE WORK SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE WTCPUA AND OTHER GOVERNMENTAL BODIES HAVING JURISDICTION PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MINIMIZE DISRUPTION OF DELIVERIES, PARKING, AND OTHER ACTIVITIES.
12. DEWATERING, IF NECESSARY, SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT.
13. THE MINIMUM DEPTH OF COVER FROM TOP OF PIPE TO FINISHED GRADE FOR ALL WATER LINES SHALL BE FOUR FEET. INSTALL LINES TO AVOID HIGH POINTS.
14. CONCRETE SHALL BE CLASS 'A' WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI, UNLESS OTHERWISE NOTED.
15. REINFORCING STEEL SHALL BE ASTM A 615M, GRADE 60 UNLESS OTHERWISE NOTED.
16. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE WTCPUA MUST RELY ON THE ADEQUACY OF THE DESIGN ENGINEER. APPROVAL OF THESE PLANS BY THE WTCPUA DOES NOT RELEASE THE DESIGN ENGINEER OF THESE RESPONSIBILITIES.

**WTCPUA CONTACT INFORMATION**

FACILITIES OWNER: WEST TRAVIS COUNTY PUA  
 13215 BEE CAVE PARKWAY, BUILDING B, SUITE 110  
 BEE CAVE, TEXAS 78738  
 (512) 263-0100  
 JRIECHERS@WTCPUA.ORG  
 LAND OWNER INFORMATION: BEE CAVE HOLDINGS, LLC  
 3001 RANCH ROAD 620, STE 324  
 AUSTIN, TEXAS 78738  
 (512) 750-7272

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:  
 MILLER GRAY, LLC (512) 861-5300

MAINTENANCE: PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL:  
 CONTRACTOR

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION:  
 CONTRACTOR

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 TBPE FIRM REG. NO. F-16302



**STARBUCKS BEE CAVE**  
 14211 STATE HWY 71, BEE CAVE, TEXAS 78738

**WTCPUA NOTES**  
 1 OF 2

REVISIONS / CORRECTIONS	
NO.	DESCRIPTION

**CAUTION!**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER: 00323-001  
 DATE: 4/5/2024  
 DESIGNED: KKE  
 CHECKED: JTW

SHEET NO.  
 6 OF 41

23-789-SNPS

**TCEQ WATER DISTRIBUTION SYSTEM  
GENERAL CONSTRUCTION NOTES - REVISED FEBRUARY 2019 OR LATEST VERSION**

- THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
- ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].
- PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL(NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [§290.44(A)(2)].
- NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY [§290.44(A)(3)].
- ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].
- WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [§290.44(A)(4)].
- THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [§290.44(B)].
- THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].
- THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].
- WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASUREMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [§290.44(F)(2)].
- PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS.
- THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;
 
$$Q = \frac{LD\sqrt{P}}{148,000}$$

Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,  
L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,  
D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND  
P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE IN (PSI).
- THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-600 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;
 
$$L = \frac{SD\sqrt{P}}{148,000}$$

Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,  
S = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,  
D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND  
P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE IN (PSI).
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED MUST MEET §290.44(E)(1)-(4).
- THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT [§290.44(E)(5)].
- FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION [§290.44(E)(6)].
- SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE [§290.44(E)(7)].
- WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAIN FIELDS [§290.44(E)(8)].
- THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14 OR MOST RECENT, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].
- DE-CHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

**WATER AND WASTEWATER UTILITY NOTES (WTCPUA)  
REVISED MAY 25, 2020**

- WEST TRAVIS COUNTY PUA IS THE WATER AND / OR WASTEWATER SERVICE PROVIDER FOR THIS PROJECT.A PRE-CONSTRUCTION MEETING WITH THE WTCPUA SHALL BE HELD PRIOR TO COMMENCEMENT OF CONSTRUCTION TO SCHEDULE INSPECTION OF INSTALLATION OF WATER/WASTEWATER FACILITIES. WATER FACILITIES WILL BE INSPECTED UP TO, AND INCLUDING, THE WATER METER AND/OR FIRE HYDRANTS. THE CONTACT NUMBER FOR WTCPUA IS (512) 263- 0100.
  - THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND STANDARD DETAILS CURRENT AT THE TIME OF CONSTRUCTION SHALL GOVERN MATERIALS AND METHODS USED TO PERFORM THIS WORK. CITY OF AUSTIN SPECIFICATIONS AND STANDARD DETAILS ARE AVAILABLE AT [HTTPS://LIBRARY.MUNICODE.COM/TX/AUSTIN/CODES/](https://library.municode.com/tx/austin/codes/)
  - CONTRACTOR SHALL OBTAIN ALL APPROVALS AND PERMITS, INCLUDING BUT NOT LIMITED TO STREET/DRIVEWAY CUT AND UTILITY CUT PERMITS FROM THE APPROPRIATE GOVERNMENTAL AGENCY BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR ALLEY.
  - THE WTCPUA SHALL BE CONTACTED AT (512) 263-0100 AT LEAST 48 HOURS BEFORE CONNECTING TO THEIR EXISTING WATER AND/OR WASTEWATER FACILITIES.
  - THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 811 OR 1-800-545-6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. IN ADVANCE OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
  - NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND/OR WASTEWATER SERVICES.
  - WHERE WATER LINES AND SEWER LINE ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC §217.53(D) (PIPE DESIGN) AND 30 TAC §290.44(E) (WATER DISTRIBUTION). ANY DEVIATION THESE STANDARDS SHALL REQUIRE A VARIANCE APPROVED BY TCEQ BEFORE SUBMITTING PIPING ASSIGNMENTS TO THE WTCPUA.
  - THE CITY OF AUSTIN SPECIFICATION ITEM 509S WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE. CONTRACT DOCUMENTS, WHICH INCLUDE A TRENCH SAFETY PLAN SIGNED AND SEALED BY A TEXAS PROFESSIONAL ENGINEER AND A PAY ITEM FOR TRENCH SAFETY MEASURES, IN COMPLIANCE WITH OSHA, STATE, COUNTY, AND CITY REQUIREMENTS BEFORE BEGINNING WORK ON THE PROJECT.
  - ALL MATERIAL TESTS, INCLUDING SOIL DENSITY TESTS AND RELATED SOIL ANALYSIS, SHALL BE ACCOMPLISHED BY AN INDEPENDENT LABORATORY FUNDED BY THE OWNER IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 1804S.4.
  - CONNECTIONS TO EXISTING WTCPUA WATER LINES SHALL BE MADE BY CUT-IN TEES IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(24). ISOLATION VALVES SHALL BE INSTALLED ON THE ENDS OF THE CUT-IN TEE, AS NECESSARY. A SHUT-OUT VALVE PLAN SHALL BE PROVIDED SHOWING THE LOCATION OF EXISTING GATE VALVES IN THE VICINITY OF THE CONNECTION. THE SHUT-OUT PLAN SHALL IDENTIFY ALL AFFECTED PROPERTY OWNERS. CONTRACTOR SHALL PERFORM ALL WORK AND SHALL FURNISH ALL MATERIALS, INCLUDING DRAINING AND CUTTING INTO EXISTING PIPING AND CONNECTING A NEW PIPELINE OR OTHER EXTENSION INTO THE EXISTING PRESSURE PIPING, FORMING AN ADDITION TO THE POTABLE WATER TRANSMISSION AND DISTRIBUTION NETWORK AND PERFORMING NECESSARY SHUTOFFS. CONTRACTOR SHALL SCHEDULE ALL SUCH CONNECTIONS IN ADVANCE AND SUCH SCHEDULE SHALL BE APPROVED BY THE WTCPUA BEFORE BEGINNING THE WORK. AT LEAST 48 HOURS-NOTICE SHALL BE GIVEN TO THE WTCPUA PRIOR TO MAKING THE CONNECTION, AND A REPRESENTATIVE FROM THE WTCPUA SHALL BE PRESENT WHEN THE CONNECTION IS MADE. PRESSURE TAPS MAY BE APPROVED ON A CASE-BY-CASE BASIS. "SIZE ON SIZE" TAPS WILL NOT BE PERMITTED. WHEN APPROVED, ANY TAPS SHALL BE MADE BY USE OF AND APPROVED FULL CIRCLE, GASKETED CAST IRON OR DUCTILE IRON TAPPING SLEEVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES PRIOR TO MAKING THE PRESSURE TAP AND THE USE OF PRECAST BLOCKS MAY BE USED TO HOLD THE TAP IN ITS CORRECTION POSITION PRIOR TO BLOCKING. THE BLOCKING BEHIND AND UNDER THE TAP SHALL HAVE A MINIMUM OF 24 HOURS CURING TIME BEFORE THE VALVE CAN BE REOPENED FOR SERVICE FROM THAT TAP. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR A MINIMUM OF SEVENTY-TWO (72) HOURS IN ADVANCE FOR THE WTCPUA TO NOTIFY THE AFFECTED CUSTOMERS. THE WTCPUA SHALL BE PRESENT WHILE ALL WORK IS PERFORMED TO MAKE THE CONNECTION.
  - THRUST RESTRAINT SHALL BE BY METAL THRUST RESTRAINTS IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(22).
  - FIRE HYDRANTS SHALL BE SET IN ACCORDANCE WITH CITY OF STANDARD SPECIFICATION ITEM 51LS.3 E AND SHALL BE APPROVED FIRE DEPARTMENT OR OTHER APPROPRIATE PARTY PRIOR TO INSTALLATION. FIREHYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLY WRAP BAG AND TAPED INTO PLACE. THE POLY WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED INSERVICE. FIRE HYDRANTS THAT ARE TO BE USED AS DRAIN HYDRANTS SHALL BE PAINTED SILVER W/ BLUE CAPSPRIOR TO ACCEPTANCE. WHERE STORZ ADAPTORS ARE REQUIRED (HAYS COUNTY), FIRE HYDRANTS SHALL BEMANUFACTURED WITH INTEGRAL STORZ ADAPTORS.
  - WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(29) AND/OR TCEQ RULES.
  - TEST PRESSURE FOR 2-HOUR TEST SHALL BE AT 175 PSI AT THE LOWEST POINT IN THE LINE.
- NOTE:**  
PRIOR TO PRESSURE TESTING, CONTRACTOR SHALL VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT BACK TO AND INCLUDING THE VALVE AGAINST WHICH THE PRESSURE TEST SHALL BE PERFORMED, HAS BEEN INSTALLED TO AT LEAST THE SPECIFICATIONS OF THIS PROJECT. FAILURE TO VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT IN THE EXISTING LINE MEETS OR EXCEEDS THE SPECIFICATIONS OF THIS PROJECT MAY RESULT IN SERIOUS DAMAGE TO THE EXISTING WATERLINE.
  - WATER LINES SHALL BE FILLED WITH WATER AND ALL AIR EXPELLED AT LEAST 24 HOURS BEFORE TESTING. ALL SERVICE LATERALS AND DRAIN VALVE LEADS, WITH THE HYDRANT VALVES CLOSED AND NOZZLE CAPS OPEN SHALL BE INCLUDED IN THE TESTS.
  - CONTRACTOR SHALL SUBMIT A DISINFECTION AND FLUSHING PLAN IN ACCORDANCE WITH AWWA STANDARDS TO THE WTCPUA FOR APPROVAL. REQUIRED FLUSHING VOLUMES, FLUSHING SCHEDULE, AND METHOD OF DISPOSAL OF FLUSH WATER SHALL BE IN ACCORDANCE WITH THE APPROVED PLAN.
  - GATE VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO AWWA C509, WITH A MINIMUM RATED WORKING PRESSURE OF 250 PSIG.
  - FORCE MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(27) AND/OR TCEQ RULES.
  - GRAVITY SANITARY SEWER MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEMS 510.3(26) AND/OR TCEQ RULES. IN ADDITION, ALL GRAVITY SANITARY SEWER MAINS SHALL BE TELEVIEWED PRIOR TO ACCEPTANCE BY WTCPUA. DIGITAL FILES (VIA CD-ROM) CLEARLY SHOWING TELEVIEWED RECORDING SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOLLOWING INSPECTION.
  - LOCATOR 'FINDER' WIRE - ALL NON -METALLIC WATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVE THE PIPE. THE WIRE SHALL BE POLY-INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT EACH ISOLATION VALVE SUCH THAT IT IS ACCESSIBLE FROM THE VALVE BOX.

**WATER AND WASTEWATER UTILITY NOTES (WTCPUA)  
REVISED MAY 25, 2020**

- LOCATOR 'FINDER' WIRE - ALL NON-METALLIC WASTEWATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVE THE PIPE. THE WIRE SHALL BE POLY-INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT READILY ACCESSIBLE LOCATIONS THROUGHOUT THE COLLECTION SYSTEM.
- ALL VALVE RISERS SHALL HAVE A 1'-6" SQUARE CONCRETE BOX POURED AROUND THEM AT FINISHED GRADE.
- ALL MANHOLES SHALL BE LINED WITH A CORROSION RESISTANT LINING APPROVED BY THE WTCPUA.
- BOLTED AND GASKETED COVERS SHALL BE USED FOR ALL MANHOLES LOCATED IN THE 100-YEAR FLOODPLAIN WHERE THERE ARE MORE THAN THREE GASKETED MANHOLES IN A ROW, VENTS SHALL BE PROVIDED ONE VERY THIRD MANHOLE.
- THE DOWNSTREAM END OF ANY FORCE MAIN SHALL BE TERMINATED IN A SANITARY SEWER MANHOLE IN A MANNER TO MINIMIZE TURBULENCE.
- CONTRACTOR SHALL HAVE NECESSARY EROSION AND SEDIMENTATION CONTROLS IN PLACE PRIOR TO COMMENCING WATER/WASTEWATER FACILITY CONSTRUCTION.
- RECORD DRAWINGS, AS STIPULATED BY THE WTCPUA, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR VERIFICATION AND FURNISHED TO THE WTCPUA UPON COMPLETION OF THE PROJECT.
- THE WTCPUA WILL OWN AND OPERATE ALL WATER LINES AND APPURTENANCES UP TO AND INCLUDING THE WATER METER. THESE IMPROVEMENTS WILL BE DEFINED BY A RECORDED EASEMENT OR IN PUBLIC RIGHT-OF-WAY.
- ANY PORTIONS OF WASTEWATER LINES INCLUDING SERVICES THAT ARE LOCATED OUTSIDE OF A RECORDED EASEMENT OR PUBLIC RIGHT-OF-WAY WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER, OR HIS/HER ASSIGNS.
- WHERE EXISTING WATER AND/OR WASTEWATER INFRASTRUCTURE IS TO BE ABANDONED, THE ENGINEER SHALL SUBMIT AN ABANDONMENT PLAN FOR APPROVAL BY THE WTCPUA.
- WATER SERVICES SHALL BE INSTALLED USING HDPE PIPE. COPPER IS NOT ALLOWED.
- FOR ANY STORM SEWER LINE CROSSING A WATER OR WASTEWATER LINE CLOSER THAN 18", THE STORM SEWER PIPE SHALL BE LAID SUCH THAT NO STORM SEWER JOINTS WILL BE OVER THE WATER PIPE CROSSING.

OTHER NOTES – ENGINEER IS RESPONSIBLE FOR INCLUDING ALL APPLICABLE NOTES, INCLUDING BUT NOT LIMITED TO COUNTY, CITY, TXDOT, STATE, FIRE DEPARTMENT, TCEQ (CZP, WPAP, ORGANIZED SEWAGE COLLECTION SYSTEM NOTES, GENERAL CONSTRUCTION NOTES). ENGINEER IS RESPONSIBLE FOR ENSURING THE CURRENT ADOPTED VERSION OF ALL NOTES IS INCLUDED IN THE CONSTRUCTION PLANS.

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**STARBUCKS BEE CAVE**  
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**WTCPUA NOTES**  
2 OF 2

REVISIONS / CORRECTIONS	
NO.	DESCRIPTION

**CAUTION!**  
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FOR CITY USE ONLY:

PROJECT NUMBER 00323-001	DATE: 4/5/2024	DESIGNED: KKE	CHECKED: JTW
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**SHEET NO.**  
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EXISTING OVERALL IMPERVIOUS COVER

DRAINAGE BASIN	TOTAL AREA (SF)	IMPERV. AREA (SF)	TOTAL AREA (AC)	TOTAL AREA (SQ. MI)	% IMPERV.
EX-SITE	43,446	8,151	1.0	0.0016	18.8%
EX-OFF	16,169	16,169	0.37	0.0006	100.0%

EXISTING CURVE NUMBERS

DRAINAGE AREA	TOT. AREA (AC)	A (AC)	B (AC)	C (AC)	D (AC)	COMPOSITE CN
EX-SITE	1.0			1.0		79
EX-OFF	0.37			0.37		79
SOIL GROUP		A	B	C	D	DCM TBL 2-5, GRASSLND, FAIR
CURVE NUMBER		49	69	79	84	

EXISTING TIME OF CONCENTRATION

DRAINAGE AREA	SHEET FLOW				SHALLOW CONCENTRATED FLOW (UNPAVED)			CHANNEL FLOW		TOTAL	
	L (FT)	n	S (%)	T <sub>c</sub> (min)	L (FT)	S (%)	T <sub>c</sub> (MIN)	T <sub>c</sub>	T <sub>tot</sub>	(MIN)	(MIN)
EX-SITE	100	0.15	3.8%	6.7	218	3.8%	1.2	7.8			4.7
EX-OFF	100	0.02	2.0%	1.4	0	0.0%	0.0	5.0			3.0

PROPOSED OVERALL IMPERVIOUS COVER

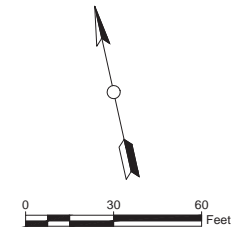
DRAINAGE BASIN	TOTAL AREA (SF)	IMPERV. AREA (SF)	TOTAL ARFA (AC)	TOTAL ARFA (SQ. MI)	% IMPERV.
PR-SITE	43,446	19,660	1.0	0.0016	45.0%
PR-OFF	16,169	10,057	0.37	0.0006	62.2%

PROPOSED CURVE NUMBERS

DRAINAGE AREA	TOT. AREA (AC)	A (AC)	B (AC)	C (AC)	D (AC)	COMPOSITE CN
PR-SITE	1.0			1.0		79
PR-OFF	0.37			0.37		79
SOIL GROUP		A	B	C	D	DCM TBL 2-5, FULLY DEV. FAIR
CURVE NUMBER		49	69	79	84	

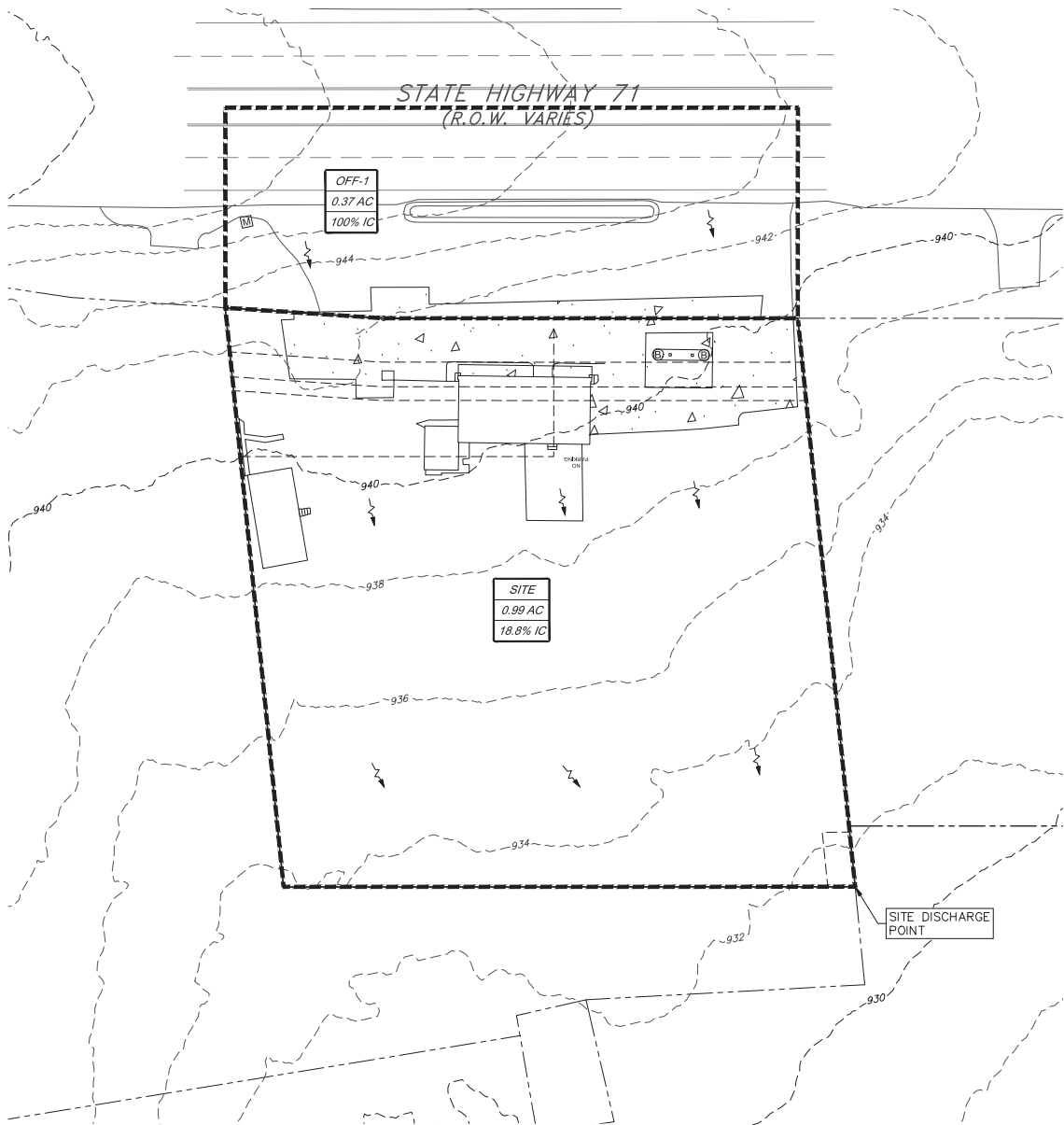
PROPOSED TIME OF CONCENTRATION

DRAINAGE AREA	SHEET FLOW				SHALLOW CONCENTRATED FLOW (PAVED)			CHANNEL FLOW		TOTAL	
	L (FT)	n	S (%)	T <sub>c</sub> (min)	L (FT)	S (%)	T <sub>c</sub> (MIN)	T <sub>c</sub>	T <sub>tot</sub>	(MIN)	(MIN)
PR-SITE	25	0.15	3.8%	2.2	293	3.8%	1.2	5.0			3.0
PR-OFF	100	0.02	2.0%	1.4	0	0.0%	0.0	5.0			3.0

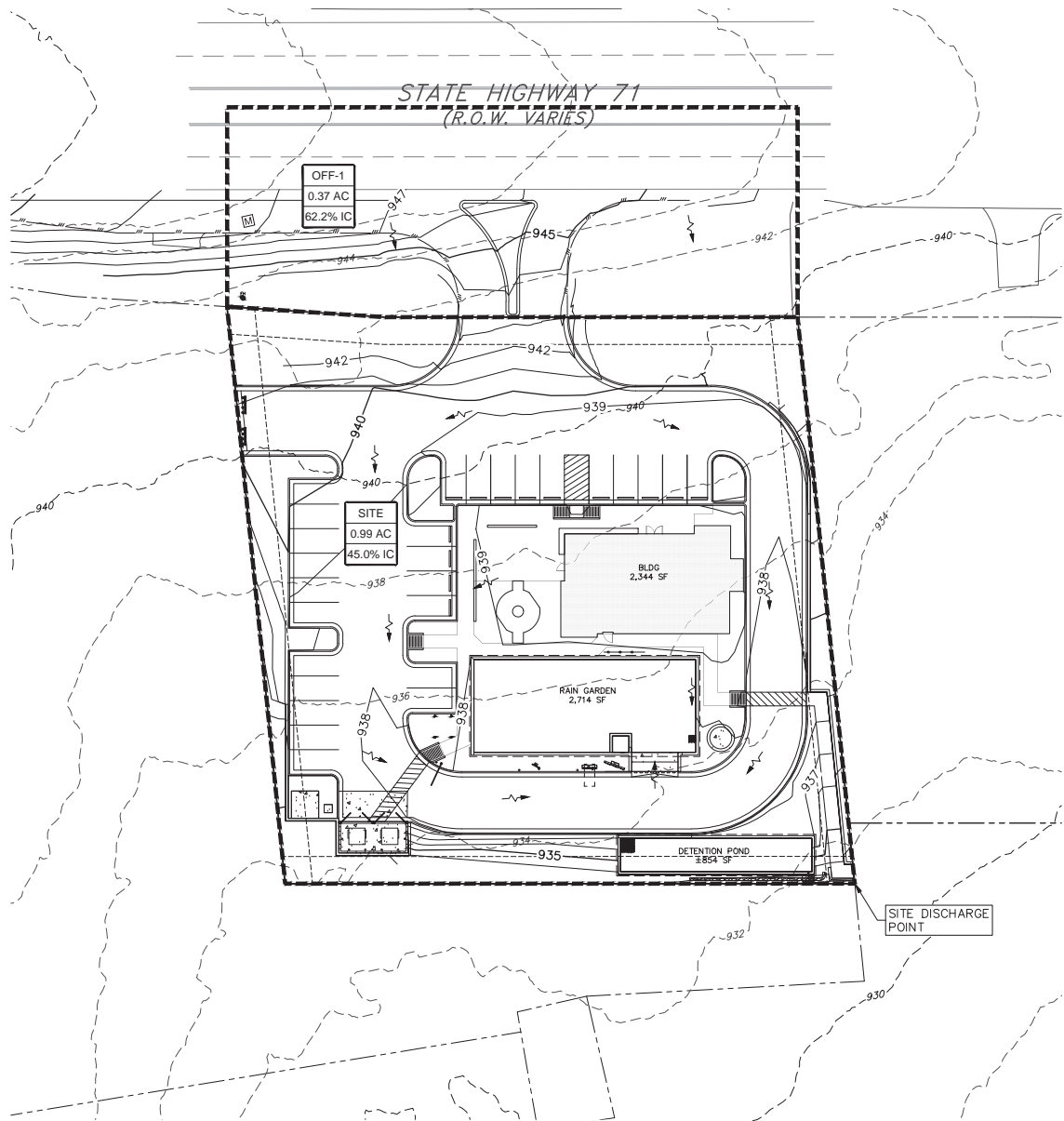


LEGEND

- SUBJECT TRACT PROPERTY LINE
- - - ADJOINER TRACT PROPERTY LINE
- - - 843 - - - EXISTING CONTOUR (MAJOR)
- - - 843 - - - EXISTING CONTOUR (MINOR)
- 843 — PROPOSED CONTOUR (MAJOR)
- 843 — PROPOSED CONTOUR (MINOR)
- - - DRAINAGE AREA BOUNDARY
- EX-2  
0.83 AC  
5% IC  
EXISTING DRAINAGE AREA LABEL
- PR-2  
0.83 AC  
40% IC  
PROPOSED DRAINAGE AREA LABEL
- > FLOW ARROW



EXISTING DRAINAGE AREA MAP



PROPOSED DRAINAGE AREA MAP

NOTES:

- POND IS SIZED FOR 65% IMPERVIOUS COVER.
- DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION, OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DRAINAGE FACILITIES.

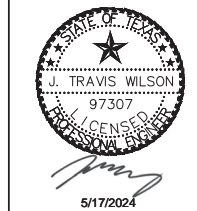


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DRAINAGE SUMMARY FOR SITE DISCHARGE POINT

ANNUAL CHANCE EXCEEDANCE (%)	RETURN FREQ (YRS)	COMPUTED PEAK FLOW RATES (CFS)		WATER SURFACE ELEV (FT)	DETENTION VOLUME (AC-F <sup>3</sup> )
		EXISTING	PROPOSED		
50%	2	4.9	6.3	4.9	0.0
10%	10	8.4	10.2	8.2	0.1
4%	25	10.8	12.8	10.5	0.1
1%	100	14.7	17.1	14.2	0.1

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**STARBUCKS BEE CAVE**  
14211 STATE HWY 71, BEE CAVE, TEXAS 78738  
**DETENTION DRAINAGE AREA MAPS**

PROJECT NUMBER	NO.	REVISIONS / CORRECTIONS		DATE	BY
		DESCRIPTION	DATE		
00323-001					

SHEET NO.  
9 OF 41  
23-789-SNPS

	AREA		IMPERVIOUS COVER DATA		
	(SF)	(AC)	AREA (SF)	DESCRIPTION	% IMPERV.
EXISTING	52929.16	1.22	8,196.04	BUILDING, STRUCTURES, PAVED AREA	15%
PROPOSED			26,291.20	BUILDING, DRIVE ISLE, PARKING AREA, SIDEWALK, CONCRETE PADS	50%

\*NOTE: Please see the water quality drainage area maps shown below for a representation of the impervious areas.

### City of Bee Cave Pollutant Load Calculations

#### STEP 1. ENTER SITE DATA

Project Name:	Starbucks Bee Cave
Drainage Area ID:	
Drainage Area (ac.):	1.22
Existing Condition Impervious Cover (%):	15
Proposed Condition Impervious Cover (%):	50

#### STEP 2. DETERMINE POLLUTANT LOADING

Pollutant	Pre-Developed Loading, Lpre (lb/yr)	Developed Loading, Ldev (lb/yr)
Total Suspended Solids (TSS)	166.66	500.89
Total Phosphorus (TP)	0.40	1.19
Oil and Grease (O&G)	5.02	15.09

\*Pollutant loading: Equation 1 from CQA ECM 1.6.9.3.8  
 $L = C * V * A_p * CF$

#### STEP 3. DETERMINE BMP POLLUTANT LOAD REMOVAL EFFICIENCIES

BMP Order in Series	BMP Type	Removal Efficiency (%)		
		TSS	TP	O&G
1	Bioretention	89.0	72.0	89.0
<b>TOTAL EFFICIENCY</b>		<b>89.0</b>	<b>72.0</b>	<b>89.0</b>

\*TSS removal efficiency and O&G (not explicitly stated, but related to TSS) are from TCEQ RG-348 Table 3-1, page 3-4

\*\*TP removal is from LCRA Technical Manual Table 2-6, page 2-11

\*\*\*Removal Efficiency Equation from CQBC ECM Section 1.6.2.G: Water Quality Facilities in Series

$$E_{TOT} = \left[ 1 - \left( 1 - \frac{E_1}{100} \right) \left( 1 - 0.65 \frac{E_2}{100} \right) \left( 1 - 0.25 \frac{E_3}{100} \right) \right] * 100$$

#### STEP 4. CALCULATE TOTAL POLLUTANT LOAD REMOVAL

Pollutant	Required Removal*		Total BMP Removal**		Meets Criteria?
	(%)	(lb/yr)	(%)	(lb/yr)	
Total Suspended Solids (TSS)	90.0	300.81	89.0	445.79	YES
Total Phosphorus (TP)	90.0	0.72	72.0	0.86	YES
Oil and Grease (O&G)	90.0	9.06	89.0	13.43	YES

\*Removal requirements per Article 7, Section 7.3.2.C of City of Bee Cave UDC (% removal of increased loading from development)

\*\*Amount removed by BMP per year equation:  $R = L_{dev} * (E_{TOT}/100)$

### APPENDIX F-7 RAIN GARDEN CALCULATIONS FOR DEVELOPMENT PERMITS

PROJECT: STARBUCKS BEE CAVE  
 CONTROL: PARTIAL FILTRATION RAIN GARDEN

#### DRAINAGE AREA DATA

DRAINAGE AREA TO CONTROL (MAX 2 AC)	1.22 AC
DRAINAGE AREA IMPERVIOUS COVER (IC)	50 %
CAPTURE DEPTH (CD)	0.80 IN

#### WATER QUALITY CONTROL CALCULATIONS:

	REQUIRED	PROVIDED
WATER QUALITY VOLUME (WQV=CD*DA*3600)	3.543 CF	3.691 CF

100-YEAR PEAK FLOW RATE TO CONTROL (Q100)

	17.1 CFS
--	----------

FILTRATION POND AREA (SF)	2.714 SF	2.714 SF
DEPTH OF PONDING (D)	MAX 1.0 FT	1.0 FT
DEPTH OF FILTRATION MEDIA (L AVG)	MIN 1.5 FT	1.50 FT
EFFECTIVE POROSITY WQV (WQVep = 0.24 * AF * L)	9/7 CF	9/7 CF
PONDED DEPTH WQV (WQVpd = AF * D)	2.714 CF	2.714 CF

TOTAL WQV

	3.691 CF
--	----------

WATER QUALITY ELEVATION (WQE)

	936.40 FT MSL
--	---------------

ELEVATION OF SPLITTER/OVERFLOW WEIR (MINIMUM WOE)

	936.40 FT MSL
--	---------------

LENGTH OF SPLITTER WEIR

	MAX 0.6	16.0 FT
--	---------	---------

REQUIRED HEAD TO PASS Q100

	MAX 0.25 FT	0.60 FT
--	-------------	---------

POND FREEBOARD PROVIDED TO PASS Q100

	MIN 0.25 FT	0.6 FT
--	-------------	--------

#### FOR FILTRATION RAIN GARDENS

RAIN GARDEN POND DRAWDOWN TIME

	MAX 48 HR	47.34 HR
--	-----------	----------

UNDERDRAIN ORIFICE SIZE (DIAMETER)

		1.125 IN
--	--	----------

UNDERDRAIN ORIFICE SIZE (AREA)

		1.00 SQ IN
--	--	------------

### RAINWATER HARVESTING TANK CALCULATIONS ISOLATION OF ROOF RUNOFF FOR ALLOWABLE INCREASE IN SITE IMPERVIOUS COVER

PROJECT: STARBUCKS BEE CAVE  
 JURISDICTION: CITY OF BEE CAVE, TX  
 APPLICABLE CODE: UNIFIED DEVELOPMENT CODE (7.3.2.L)

#### CALCULATIONS

DRAINAGE AREA TO CONTROL (DA)

	2344 SF
--	---------

DA = ROOF AREA

DRAINAGE AREA IMPERVIOUS COVER (IC)

	100 %
--	-------

WATER QUALITY CAPTURE DEPTH (CD)

	1.30 IN
--	---------

CD = 0.5' + 0.1" \* PER 10% POINT INCREASE OF IC OVER 20%

EXCESS OVER 20% = IC - 20% = 80%

PER 10% POINT INCREASE = 80% \* 0.2 = 0.8

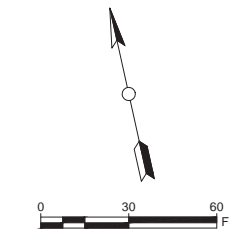
WATER QUALITY VOLUME (WQV)

	254 CF
--	--------

WQV = (CD \* DA) \* DA

CONVERSION: 1 CF = 7.48 GAL

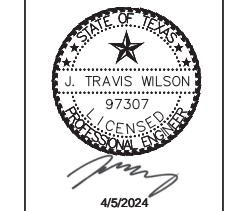
	1896 GAL
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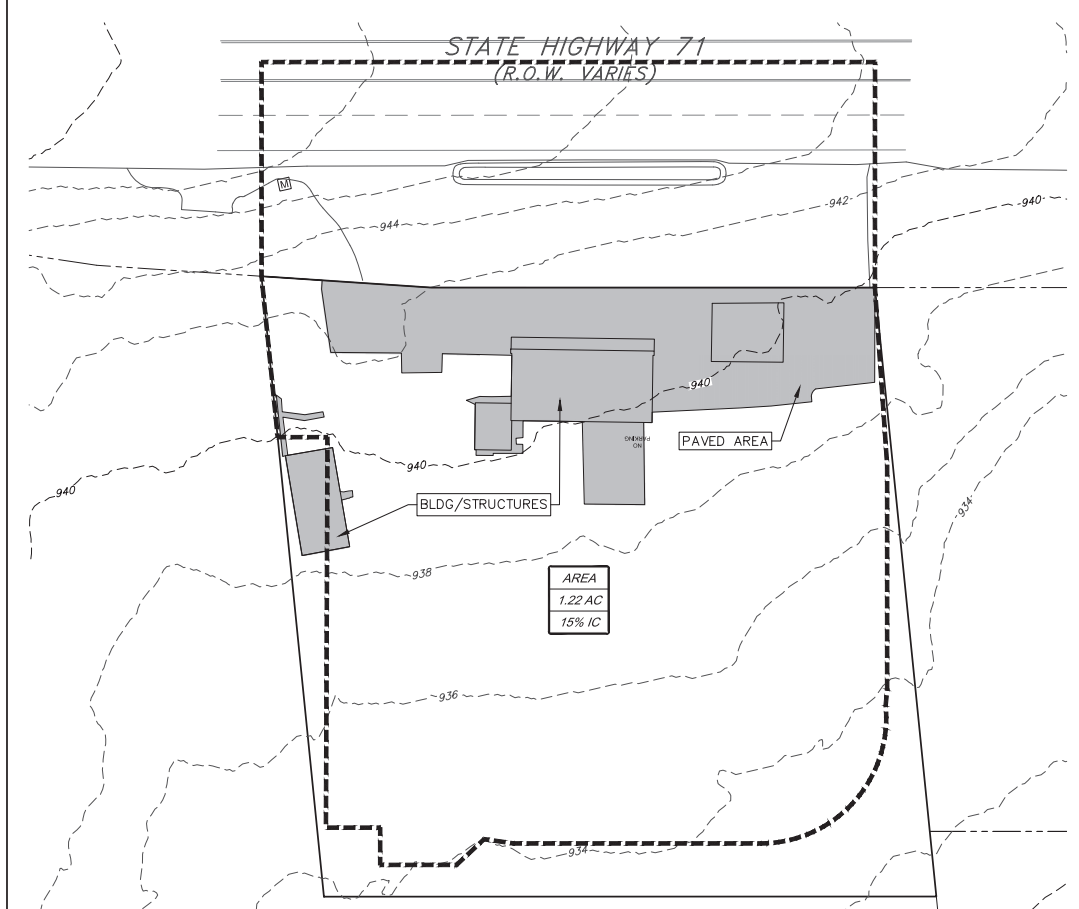
### LEGEND

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EXISTING DRAINAGE AREA LABEL
- PR-2  
0.83 AC  
40% IC  
PROPOSED DRAINAGE AREA LABEL
- IMPERVIOUS COVER AREA

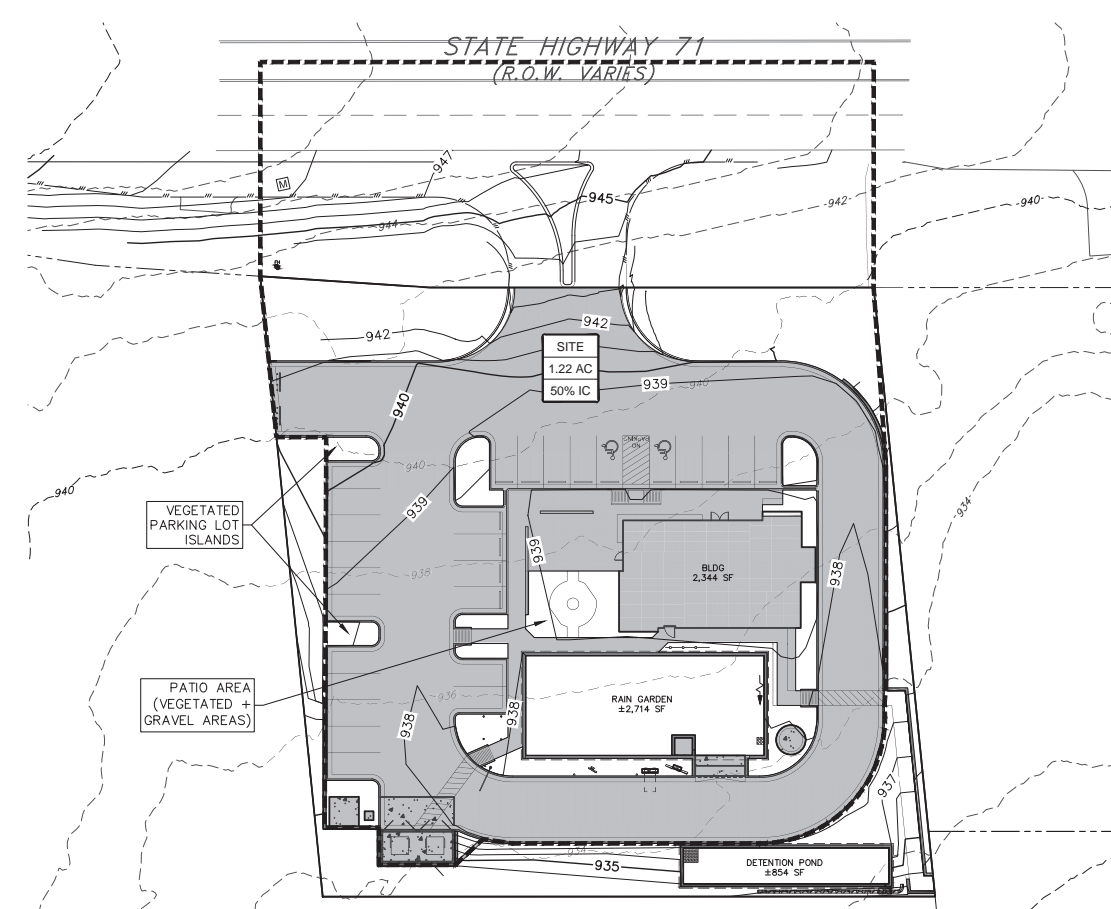
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**STARBUCKS BEE CAVE**  
 14211 STATE HWY 71, BEE CAVE, TEXAS 78738  
**WATER QUALITY DRAINAGE**  
**AREA MAPS & CALCS**



EXISTING WQ DRAINAGE AREA MAP



PROPOSED WQ DRAINAGE AREA MAP

- NOTES:**
- RAIN GARDEN (PARTIAL INFILTRATION) IS SIZED FOR ON-SITE IMPERVIOUS COVER ONLY.
  - DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION, OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DRAINAGE FACILITIES.

**811**  
 Know what's below.  
 Call before you dig.

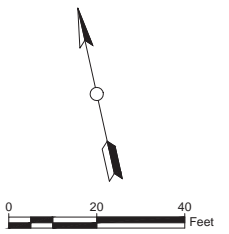
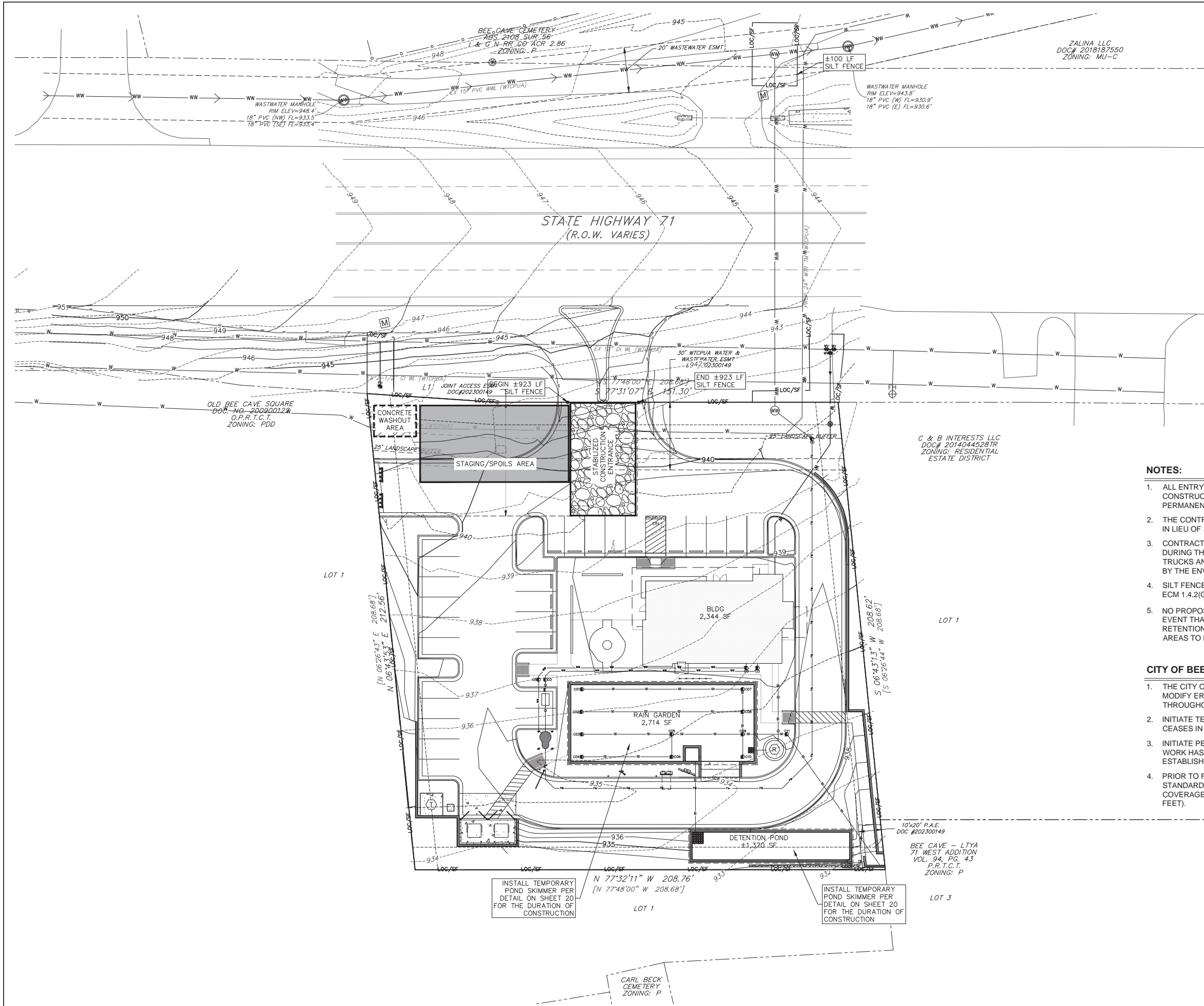
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FOR CITY USE ONLY:

NO.	REVISIONS/CORRECTIONS	
	DATE	DESCRIPTION

PROJECT NUMBER	00323-001
DATE:	4/5/2024
DESIGNED:	KKE
CHECKED:	JTW

SHEET NO.  
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 23-789-SNPS



**LEGEND**

---	SUBJECT TRACT PROPERTY LINE
---	ADJOINER TRACT PROPERTY LINE
---	843--- EXISTING CONTOUR (MAJOR)
---	843--- EXISTING CONTOUR (MINOR)
---	843--- PROPOSED CONTOUR (MAJOR)
---	843--- PROPOSED CONTOUR (MINOR)
---	LOC--- LIMITS OF CONSTRUCTION
---	LOC/SF--- LIMITS OF CONSTRUCTION/SILT FENCE
T-T-T	TREE PROTECTION
[Pattern]	STAGING/SPOILS AREA
[Pattern]	CONSTRUCTION ENTRANCE/EXIT
[Pattern]	ROCK BERM LEVEL SPREADER
(T)	TRANSFORMER
(R)	RAINWATER TANK

**NOTES:**

1. ALL ENTRY POINTS SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE UNTIL SUCH TIME AS A PERMANENT DRIVEWAY IS CONSTRUCTED.
2. THE CONTRACTOR MAY USE MULCH SOCK (COA DTL 648S-1) IN LIEU OF SILT FENCE AT THIS DISCRETION.
3. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING THE SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING PER ECM 1.4.5(D) OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
4. SILT FENCE TYPE AND INSTALLATION SHALL COMPLY WITH ECM 1.4.2(G).
5. NO PROPOSED GRADES EXCEED 15% ON THE SITE. IN THE EVENT THAT FINAL GRADES DO EXCEED 15%, PROVIDE SOIL RETENTION BLANKETS PER COA SPEC ITEM 605S OVER AREAS TO BE REVEGETATED.

**CITY OF BEE CAVE NOTES:**

1. THE CITY OF BEE CAVE HAS THE AUTHORITY TO ADD OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
2. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR MORE THAN 14 DAYS.
3. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ESTABLISHED.
4. PRIOR TO FINAL SITE ACCEPTANCE, MINIMUM REVEGETATION STANDARDS MUST BE MET ACROSS THE SITE (95% COVERAGE WITH NO BARE AREAS EXCEEDING 16 SQUARE FEET).



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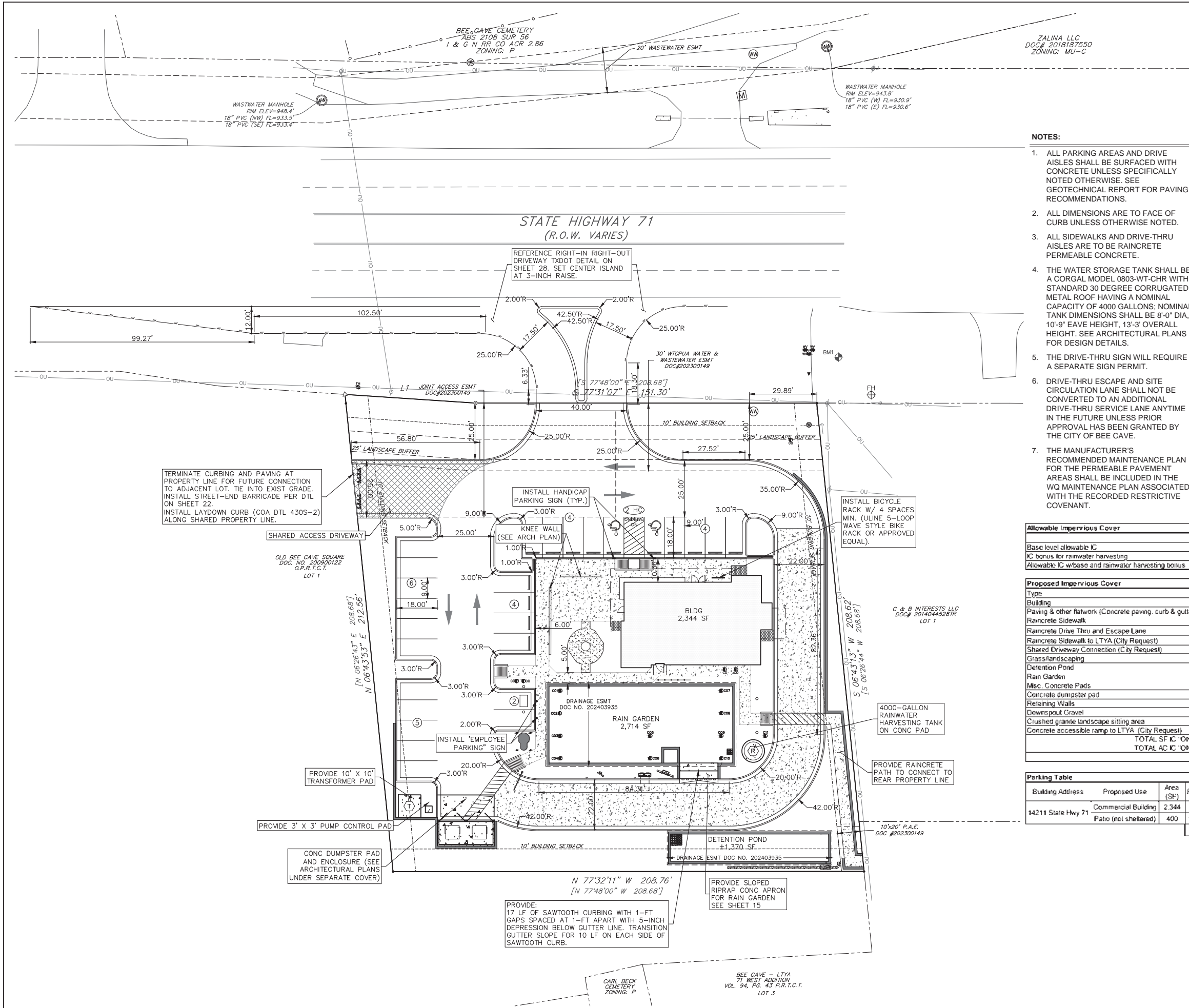
**STARBUCK'S BEE CAVE**  
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

**EROSION & SEDIMENTATION CONTROL PLAN**

PROJECT NUMBER	REVISIONS / CORRECTIONS		DATE	DESCRIPTION
	NO.	BY		
00323-001				
DATE:	4/5/2024			
DESIGNED:	KKE			
CHECKED:	JTW			

**SHEET NO.**  
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23-789-SNPS





- NOTES:**
- ALL PARKING AREAS AND DRIVE AISLES SHALL BE SURFACED WITH CONCRETE UNLESS SPECIFICALLY NOTED OTHERWISE. SEE GEOTECHNICAL REPORT FOR PAVING RECOMMENDATIONS.
  - ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
  - ALL SIDEWALKS AND DRIVE-THRU AISLES ARE TO BE RAINCRETE PERMEABLE CONCRETE.
  - THE WATER STORAGE TANK SHALL BE A CORGAL MODEL 0803-WT-CHR WITH STANDARD 30 DEGREE CORRUGATED METAL ROOF HAVING A NOMINAL CAPACITY OF 4000 GALLONS; NOMINAL TANK DIMENSIONS SHALL BE 8'-0" DIA, 10'-9" EAVE HEIGHT, 13'-3" OVERALL HEIGHT. SEE ARCHITECTURAL PLANS FOR DESIGN DETAILS.
  - THE DRIVE-THRU SIGN WILL REQUIRE A SEPARATE SIGN PERMIT.
  - DRIVE-THRU ESCAPE AND SITE CIRCULATION LANE SHALL NOT BE CONVERTED TO AN ADDITIONAL DRIVE-THRU SERVICE LANE ANYTIME IN THE FUTURE UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE CITY OF BEE CAVE.
  - THE MANUFACTURER'S RECOMMENDED MAINTENANCE PLAN FOR THE PERMEABLE PAVEMENT AREAS SHALL BE INCLUDED IN THE WQ MAINTENANCE PLAN ASSOCIATED WITH THE RECORDED RESTRICTIVE COVENANT.

**LEGEND**

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING EOP
- EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- EXISTING TREE
- EXISTING FIRE HYDRANT
- CURB AND GUTTER
- PROPOSED SIGN
- HANDICAP PARKING SYMBOL
- TRANSFORMER
- RAINWATER TANK
- ROCK AREA FOR CANOPY DOWNSPOUTS
- 6" THICK REINFORCED CONCRETE
- RAINCRETE (PERMEABLE)
- GRAVEL WALKWAY
- RETAINING WALL
- PROPOSED FIRE HYDRANT

**Allowable Impervious Cover**

	Area (SF)	Area (%)
Base level allowable IC	17,376	40%
IC bonus for rainwater harvesting	2,172	5%
Allowable IC w/base and rainwater harvesting bonus	19,548	45%

**Proposed Impervious Cover**

Type	Measured area (SF)	IC Credit (%)	Effective IC (SF)
Building	2,344	0%	2,344
Paving & other flatwork (Concrete paving, curb & gutter)	14,287	0%	14,287
Raincrete Sidewalk	2,256	50%	1,128
Raincrete Drive Thru and Escape Lane	4,625	100%	-
Raincrete Sidewalk to LTYA (City Request)	721	100%	-
Shared Driveway Connection (City Request)	1,395	100%	-
Grass/Landscaping	12,300	100%	-
Detention Pond	854	100%	-
Rain Garden	2,750	100%	-
Misc. Concrete Pads	291	0%	291
Concrete dumpster pad	573	0%	573
Retaining Walls	725	0%	725
Downspout Gravel	74	100%	-
Crushed granite landscape sitting area	211	0%	211
Concrete accessible ramp to LTYA (City Request)	33	100%	-
<b>TOTAL SF IC "ON SITE" ONLY</b>	<b>43,430</b>		<b>19,560</b>
<b>TOTAL AC IC "ON SITE" ONLY</b>	<b>0.997</b>		<b>0.449</b>
	<b>(TOTAL IC % "ON SITE" ONLY)</b>		<b>45.0%</b>

**Parking Table**

Building Address	Proposed Use	Area (SF)	Parking Ratio	Parking Required	Parking Provided	HC Parking Required	HC Parking Provided
14211 State Hwy 71	Commercial Building	2,344	1 SP:100 SF	24	27	1	2
	Patio (not sheltered)	400	1 SP:133 SF	3	-	0	0
	<b>Total</b>			<b>27</b>	<b>27</b>	<b>1</b>	<b>2</b>

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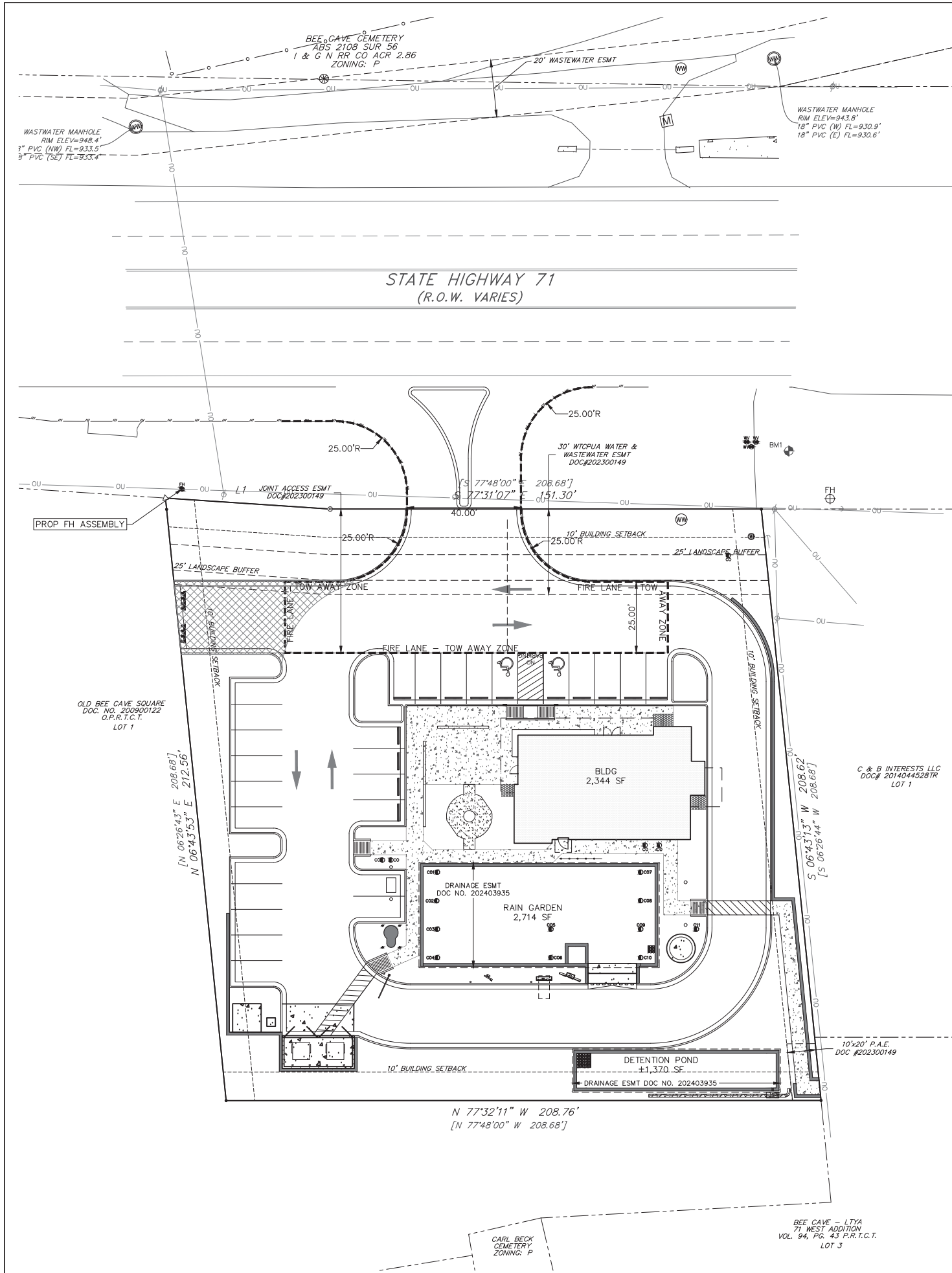
**SITE & DIMENSION CONTROL PLAN**

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER: 00323-001  
DATE: 5/13/2024  
DESIGNED: KKE  
CHECKED: JTW

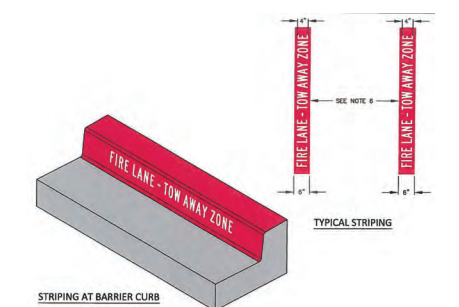
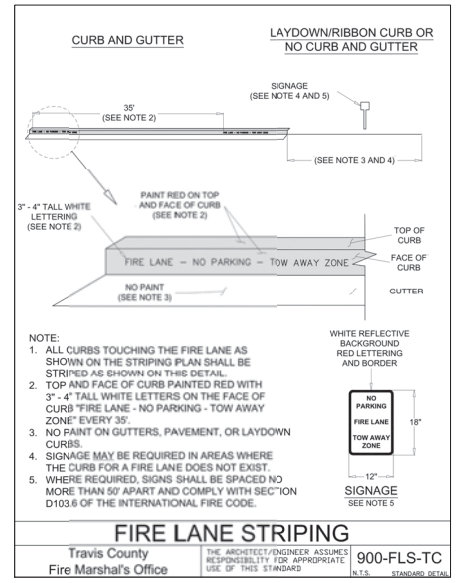
SHEET NO. 12 OF 41  
23-789-SNPS

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**FIRE CONTROL PLAN NOTES:**

1. FIRE LANE IS OFFSET 6" FOR GRAPHICAL CLARITY.
2. ALL FIRE LANE STRIPING SHALL COMPLY WITH THE CURRENT INTERNATIONAL FIRE CODE, AS ADOPTED BY THE CITY OF AUSTIN, AND CITY OF AUSTIN CODE OF ORDINANCES.
3. FIRE LANES SHALL BE CONTINUOUSLY MARKED BY RED TRAFFIC PAINT THAT IS MINIMUM 6 INCHES (6") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE.
4. "FIRE LANE - TOW AWAY ZONE" SHALL APPEAR IN FOUR INCH (4") TYPE D WHITE BLOCK LETTERS AT TWENTY-FIVE FOOT (25') INTERVALS, OR LESS, ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANE.
5. WHERE A 6" BARRIER CURB EXISTS, THE FIRE LANE STRIPING SHALL BE ON BOTH THE VERTICAL FACE OF THE CURB AND TOP OF CURB. "FIRE LANE - TOW AWAY ZONE" SHALL BE MARKED IN 4" WHITE BLOCK LETTERS ON FACE OF CURB ONLY.
6. WHERE A FIRE LANE IS ADJACENT TO PARKING SPACES THE FIRE LANE STRIPING SHALL BE AN 8" RED STRIPE PAINTED ON THE DRIVE SURFACE WITH 4" WHITE LETTERS STATING "FIRE LANE NO PARKING TOW AWAY ZONE" FIRE LANE STRIPING SHALL EXTEND BEHIND ALL PARKING SPACES.
7. WHERE A FIRE HYDRANT, FIRE DEPARTMENT CONNECTION, OR OTHER FIRE PROTECTION EQUIPMENT IS LOCATED ON A FIRE LANE, THE FIRE LANE SHALL BE A MINIMUM OF TWENTY-SIX FEET (26') IN WIDTH, EXCLUSIVE OF SHOULDERS.

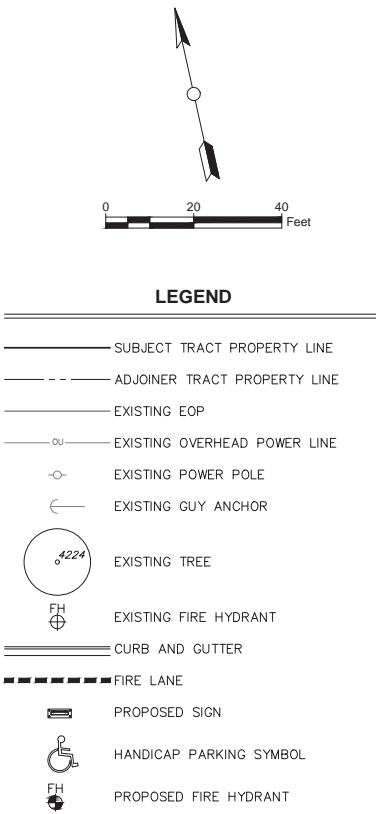


**TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 FIRE DEPARTMENT - SITE PLAN NOTES**

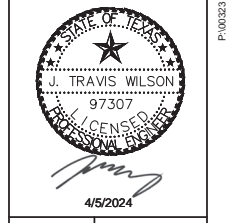
1. DESIGNS FOR SITE IMPROVEMENTS SHALL MEET THE CURRENT DESIGN CRITERIA AS REQUIRED BY TCESD NO. 6.
2. ALL PLANS (SITE, BUILDING, FIRE ALARM, FIRE SPRINKLER) SHALL BE SUBMITTED TO LTRF FOR REVIEW. TWO FULL-SIZE SETS ARE REQUIRED. A REVIEW LETTER WILL BE GENERATED. REVIEWS WILL NOT BE PERFORMED UNTIL THE APPLICABLE REVIEW FEES ARE PAID.
3. UPON PLAN APPROVAL, A PERMIT WILL BE ISSUED. THE PERMIT MUST BE CONSPICUOUSLY POSTED.
4. AN ALL-WEATHER DRIVING SURFACE (FIRE APPARATUS ACCESS) MUST BE INSTALLED IN LOCATIONS SHOWN ON THE SITE PLAN, PRIOR TO ANY BUILDING CONSTRUCTION BEYOND THE FOUNDATION.
5. ALL PERVIOUS/DECORATIVE PAVING SHALL BE ENGINEERED AND INSTALLED FOR 80,000 POUNDS LIVE-VEHICLE LOADS. ANY PERVIOUS/DECORATIVE PAVING WITHIN 100 FEET OF ANY BUILDING MUST BE APPROVED BY THE FIRE DEPARTMENT.
6. VERTICAL CLEARANCE REQUIRED FOR FIRE APPARATUS IS 13 FEET, SIX INCHES FOR THE FULL 25 FEET WIDTH OF ACCESS DRIVES AND ROUTES FOR INTERNAL CIRCULATION. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH APPROVED PROVISIONS FOR THE TURNING AROUND OF FIRE APPARATUS, PER FIGURE B-4 OF THIS MANUAL.
7. THE MAXIMUM ALLOWABLE DRIVEWAY, DRIVE AISLE OR FIRE LANE GRADE IS 15 PERCENT.
8. THE MARKINGS OF FIRE LANES MUST BE RED WITH WHITE STENCILING OR WHITE WITH RED STENCILING READING "FIRE LANE - TOW AWAY ZONE" IN LETTERING NO LESS THAN THREE INCHES IN HEIGHT. THE STENCILING SHALL BE AT INTERVALS OF 35 FEET OR LESS. ALTERNATIVE MARKING OF FIRE LANES MAY BE APPROVED BY THE FIRE CHIEF, OR HIS/HER DESIGNATED AGENT, PROVIDED FIRE LANES ARE CLEARLY IDENTIFIED AT BOTH ENDS AND AT INTERVALS NOT TO EXCEED 35 FEET. EXISTING FIRE LANE MARKINGS SHALL BE GRANDFATHERED PROVIDED THAT THEY MEET THE WORDING AND INTERVAL REQUIREMENTS THAT WERE ACCEPTED ON APPROVED SITE PLANS AND OTHER TYPE FIRE LANE SUBMITTALS APPROVED BY THE FIRE DEPARTMENT. EXISTING FIRE LANES THAT ARE IN NEED OF RE-PAINTING SHALL MEET THE REQUIREMENTS OF THIS SECTION.
9. THE FIRE DEPARTMENT CONNECTION (FDC) CONNECTION SHALL BE INSTALLED WHERE SHOWN ON THE SITE PLAN.
10. HYDRANTS MUST BE INSTALLED WITH THE CENTER OF THE FOUR AND ONE-HALF INCH STEAMER OPENING AT LEAST 18 INCHES ABOVE FINISHED GRADE. THE FOUR AND ONE-HALF INCH STEAMER OPENING MUST FACE THE DRIVEWAY OR STREET WITH THREE- TO SIX-FOOT SETBACKS FROM THE CURB LINE(S). NO OBSTRUCTION IS ALLOWED WITHIN THREE FEET OF ANY HYDRANT, AND THE FOUR AND ONE-HALF INCH OPENING MUST BE TOTALLY UNOBSTRUCTED FROM THE STREET/DRIVEWAY.
11. CONTRACTOR SHALL INSTALL BLUE REFLECTIVE MARKERS IN THE PAVEMENT PER TCESD NO. 6 SPECIFICATIONS. NO IMPROVEMENTS MAY BE OCCUPIED UNTIL THE MARKERS ARE INSTALLED.
12. FIRE HYDRANTS SHALL HAVE NATIONAL HOSE THREADS.
13. STATIC WATER TANK HARD SUCTION CONNECTOR SHALL HAVE SIX-INCH NATIONAL HOSE THREADS.
14. A CERTIFIED OR WITNESSED PRESSURE TEST IS REQUIRED FOR ALL WATER MODELS, REQUIRED HYDRANT FLOW TESTS OR SPRINKLER SYSTEM DESIGNS.
15. HYDRANTS SHALL BE PAINTED SILVER AND THE BONNET AND CAPS SHALL BE PAINTED THE DESIGNATED COLOR PER THE GALLONS PER MINUTE (GPM) AS FOLLOWS:

CLASS AA	LIGHT BLUE	1500 OR HIGHER GPM
CLASS A	GREEN	1000 - 1499 GPM
CLASS B	ORANGE	500 - 1499 BPM
CLASS C	RED	LESS THAN 500 GP<
CLASS D	BLACK	OUT OF SERVICE

16. COMMERCIAL DUMPSTERS AND CONTAINERS WITH AN INDIVIDUAL CAPACITY OF ONE- AND ONE-HALF CUBIC YARDS OR GREATER SHALL NOT BE STORED OR PLACED WITHIN 10 FEET OF OPENINGS, COMBUSTIBLE WALLS OR COMBUSTIBLE EAVE LINES.
17. "KEY BOXES"/"KEY SWITCHES" (KNOX-BOX® RAPID ENTRY SYSTEM) SHALL BE INSTALLED IN THE LOCATION(S) SHOWN ON THE SITE/BUILDING PLANS AS APPROVED BY TCESD NO. 6. CONTACT LTRF FOR ORDERING INFORMATION. NO IMPROVEMENTS MAY BE OCCUPIED UNTIL THE KEY BOX/KEY SWITCH IS INSTALLED.



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**STARBUCKS BEE CAVE**  
 14211 STATE HWY 71, BEE CAVE, TEXAS 78738  
**FIRE CONTROL PLAN**

NO.	DATE	REVISIONS/CORRECTIONS	
		DESCRIPTION	BY

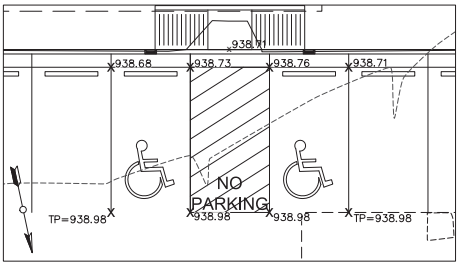
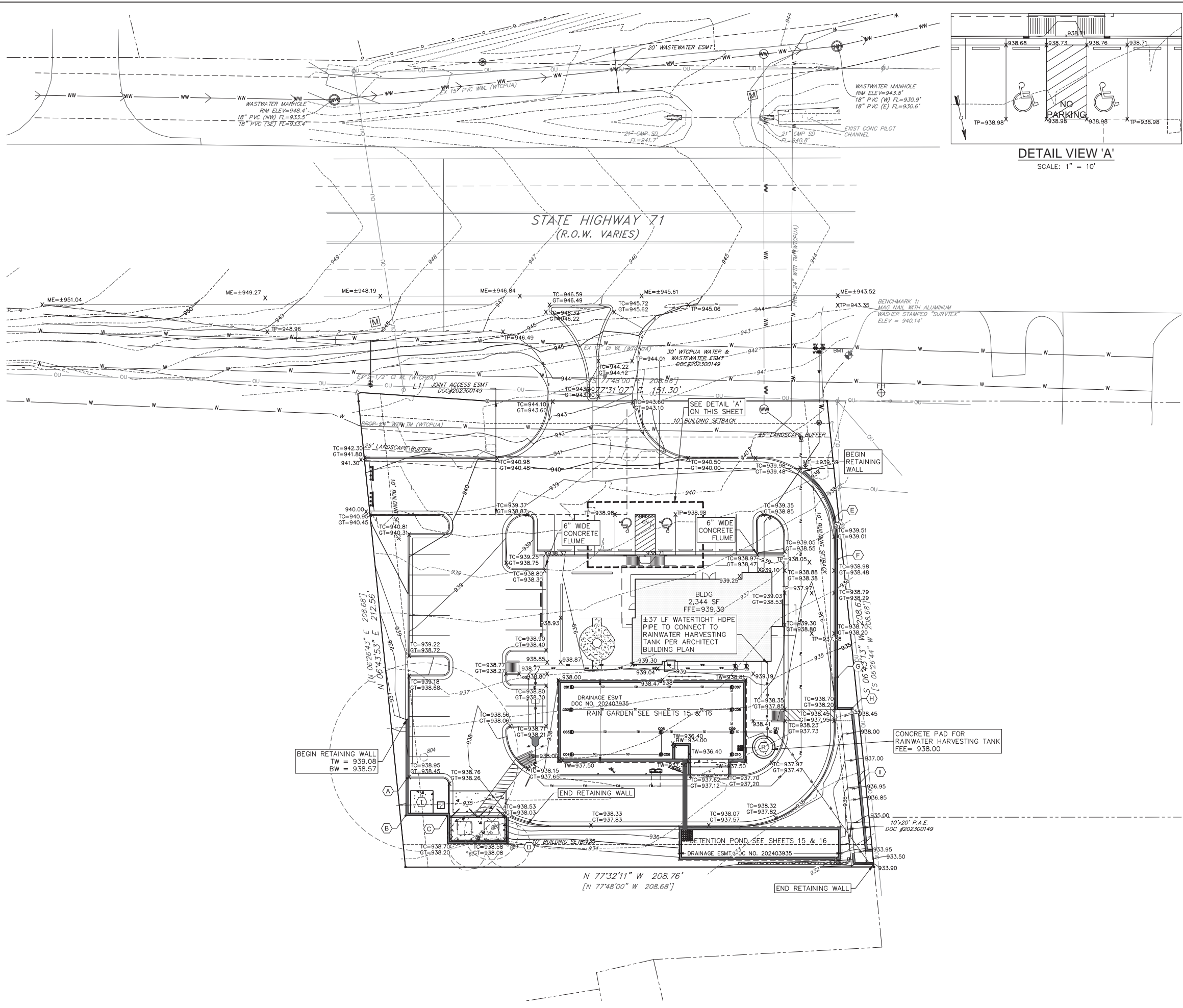
  

PROJECT NUMBER	00323-001
DATE:	4/5/2024
DESIGNED:	KKE
CHECKED:	JTW

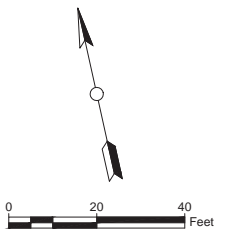
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**DETAIL VIEW 'A'**  
SCALE: 1" = 10'



**LEGEND**

- SUBJECT TRACT PROPERTY LINE
- - - ADJOINER TRACT PROPERTY LINE
- 843--- EXISTING CONTOUR (MAJOR)
- 843--- EXISTING CONTOUR (MINOR)
- 843— PROPOSED CONTOUR (MAJOR)
- 843— PROPOSED CONTOUR (MINOR)
- x 521.2 PROPOSED SPOT ELEVATION
- PROPOSED STORM FLOW

**TAGS**

- (A) TW = 938.95  
BW = 935.50
- (B) TW = 938.98  
BW = 935.86
- (C) TW = 938.63  
BW = 934.93
- (D) TW = 938.58  
BW = 934.59
- (E) TW = 939.54  
BW = 937.30
- (F) TW = 939.10  
BW = 936.48
- (G) TW = 938.53  
BW = 934.63
- (H) TW = 938.28  
BW = 935.05
- (I) TW = 936.85  
BW = 932.86

**ABBREVIATION LIST**

- ME= MATCH EXISTING
- TP= TOP OF PAVEMENT
- GT= GUTTER
- TC= TOP OF CURB
- FFE= FINISHED FLOOR ELEVATION
- TW= TOP OF WALL
- BW= BOTTOM OF WALL



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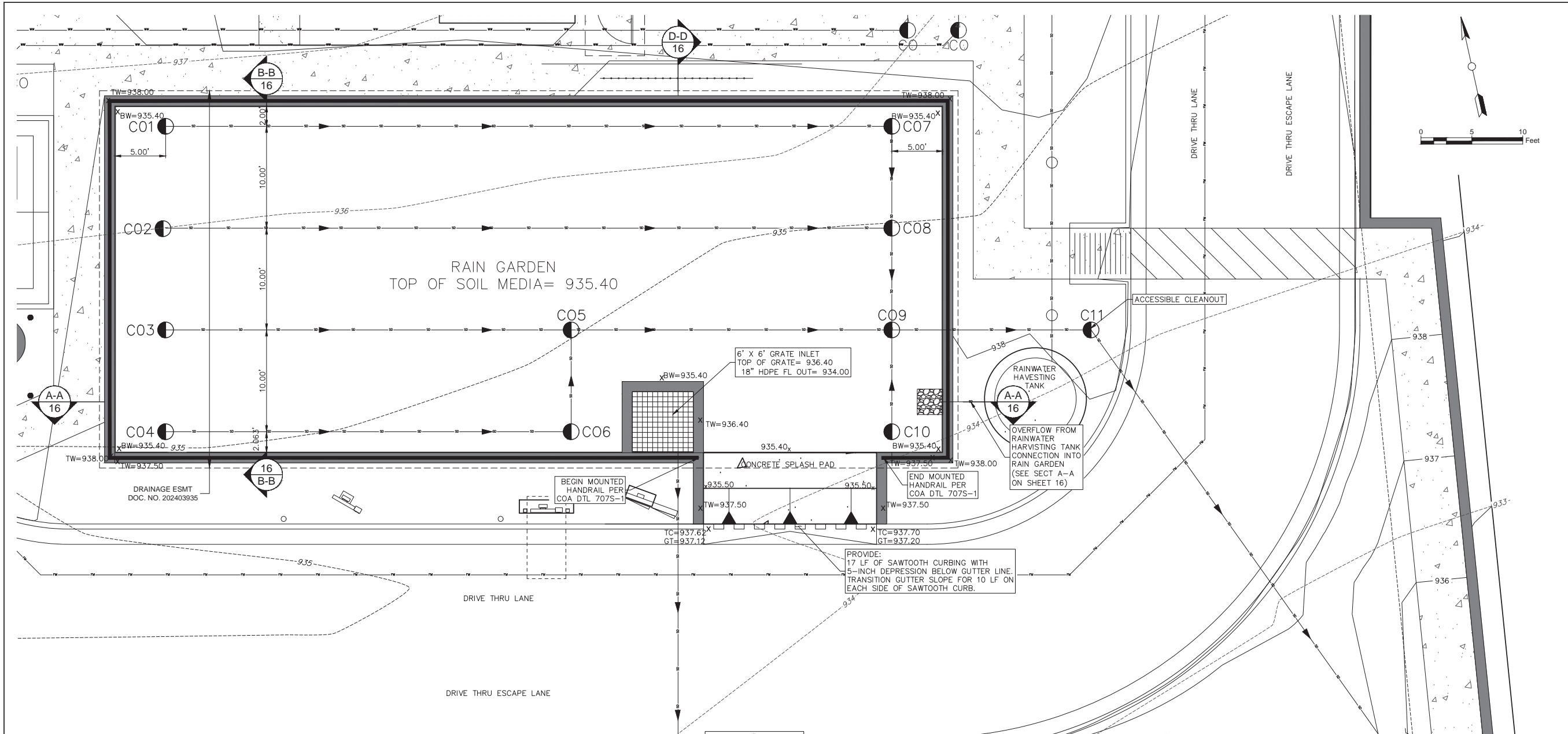


**STARBUCKS BEE CAVE**  
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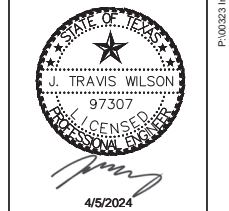
**OVERALL GRADING & STORM DRAIN PLAN**

NO.	REVISIONS / CORRECTIONS	
	DATE	DESCRIPTION

PROJECT NUMBER: 00323-001  
DATE: 4/5/2024  
DESIGNED: KKE  
CHECKED: JTW



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**STARBUCKS BEE CAVE**  
 14211 STATE HWY 71, BEE CAVE, TEXAS 78738

**DETENTION POND & RAIN GARDEN PLAN**

**APPENDIX F.7 RAIN GARDEN CALCULATIONS FOR DEVELOPMENT PERMITS**

**PROJECT CONTROL**  
 STARBUCKS BEE CAVE  
 PARTIAL FILTRATION RAIN GARDEN

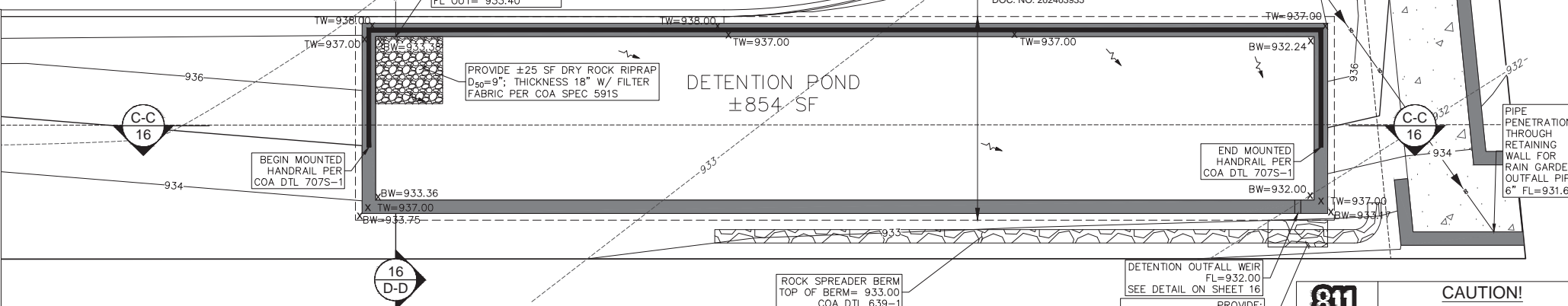
DRAINAGE AREA DATA	
DRAINAGE AREA TO CONTROL (MAX 2 AC)	1.22 AC
DRAINAGE AREA IMPERVIOUS COVER (IC)	50 %
CAPTURE DEPTH (CD)	0.80 IN

WATER QUALITY CONTROL CALCULATIONS	
WATER QUALITY VOLUME (WQV=C <sub>D</sub> D <sub>A</sub> 3630)	3,543 CF
100-YEAR PEAK FLOW RATE TO CONTROL (Q100)	17.1 CFS

FILTRATION POND AREA (SF)	
DEPTH OF PONDING (D)	1.0 FT
DEPTH OF FILTRATION MEDIA (L AVG)	1.50 FT
EFFECTIVE POROSITY WQV (WQV <sub>ep</sub> = 0.24 * AF * L)	977 CF
POUNDED DEPTH WQV (WQV <sub>pd</sub> = AF * D)	2,714 CF
TOTAL WQV	3,691 CF

WATER QUALITY ELEVATION (WQE)	
ELEVATION OF SPLITTER/OVERFLOW WEIR (MINIMUM WQE)	936.40 FT MSL
LENGTH OF SPLITTER WEIR	16.0 FT
REQUIRED HEAD TO PASS Q100	0.50 FT
POUND HEADBOARD PROVIDED TO PASS Q100	0.6 FT

FOR FILTRATION RAIN GARDENS	
RAIN GARDEN POND DRAWDOWN TIME	MAX 48 HR
UNDERDRAIN ORIFICE SIZE (DIAMETER)	1.125 IN
UNDERDRAIN ORIFICE SIZE (AREA)	1.00 SQ IN



DETENTION POND ELEVATION DISCHARGE RATING CURVE		
CONTROL 1 WEIR		
Width	Height	Q
Flowline	(FT)	(CFS)
932	0.00	0.0
933	1.00	1.5
934	2.00	4.2
935	3.00	7.8
936	4.00	12.0
937	5.00	16.8

WQ CLEANOUT FLOW LINES	
C01	933.21
C02	933.13
C03	933.03
C04	933.12
C05	932.69
C06	932.78
C07	932.6
C08	932.51
C09	932.42
C10	932.58
C11	932.25

**NOTES:**

- THE TOPS OF ALL CLEANOUTS MUST BE FLUSH WITH THE TOP OF THE RAIN GARDEN SOIL MEDIA WITH THE EXCEPTION OF ACCESSIBLE CLEANOUT, WHICH IS TO BE FLUSH WITH ADJACENT GRADE.

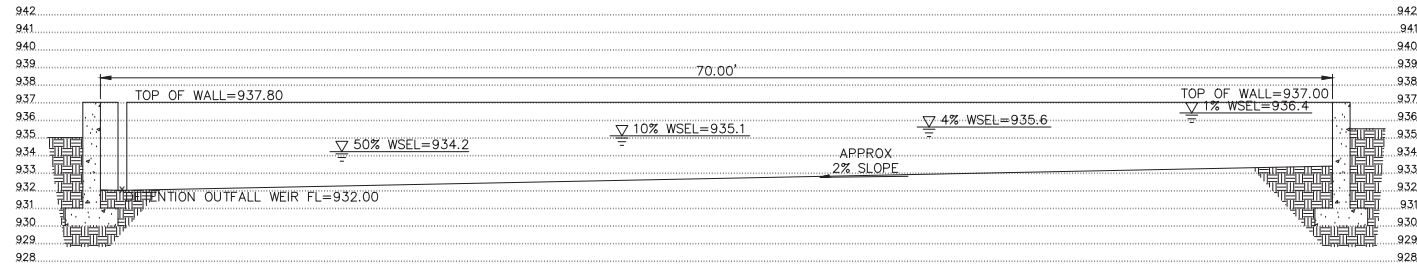
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REVISIONS / CORRECTIONS	
NO.	DATE

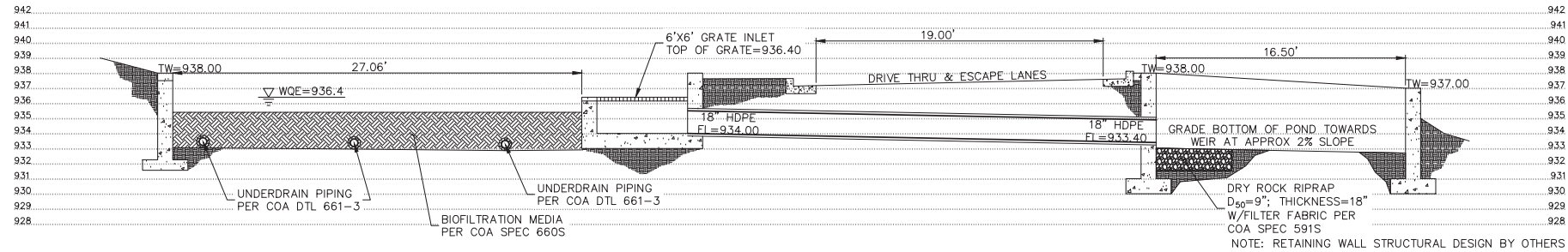
PROJECT NUMBER	00323-001
DATE:	4/5/2024
DESIGNED:	KKE
CHECKED:	JTW

**SHEET NO.**  
 15 OF 41  
 23-789-SNPS



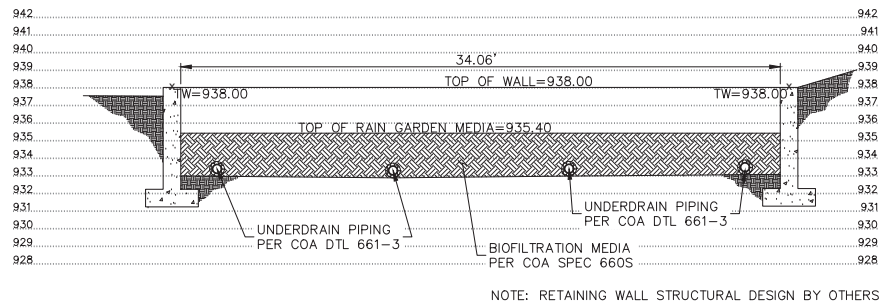
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

**C-C DETENTION POND SECTION**  
 15 SCALE: 1" = 5' HORZ  
 1" = 5' VERT



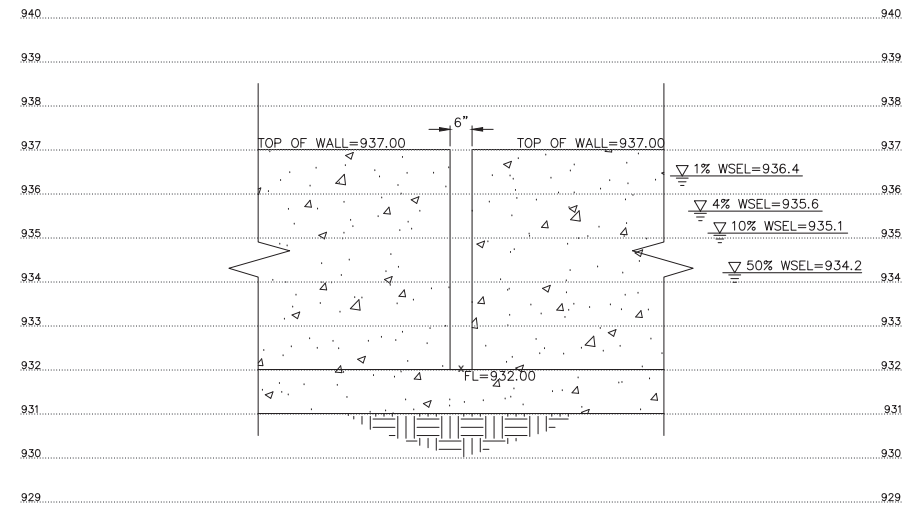
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

**D-D DETENTION POND SECTION**  
 15 SCALE: 1" = 5' HORZ  
 1" = 5' VERT



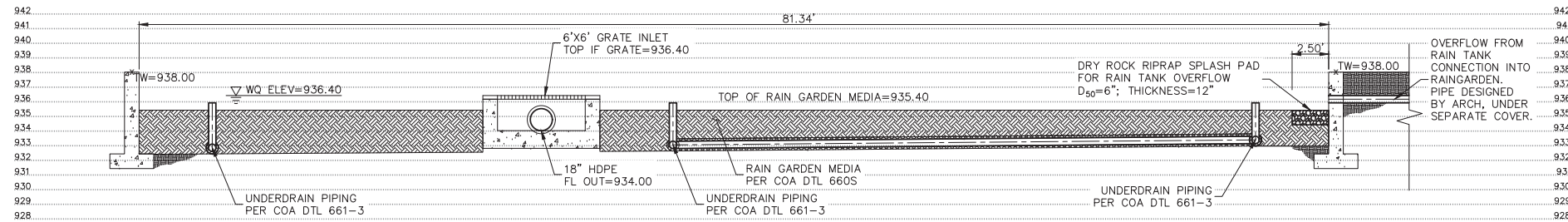
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

**B-B RAIN GARDEN SECTION**  
 15 SCALE: 1" = 5' HORZ  
 1" = 5' VERT



NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

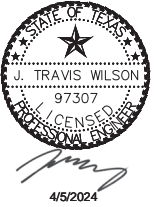
**DETENTION OUTFALL WEIR SECTION**  
 15 SCALE: 1" = 2' HORZ  
 1" = 2' VERT



NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

**A-A RAIN GARDEN SECTION**  
 15 SCALE: 1" = 5' HORZ  
 1" = 5' VERT

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**DETENTION POND &  
 RAIN GARDEN SECTIONS**

REVISIONS/CORRECTIONS	
NO.	DESCRIPTION



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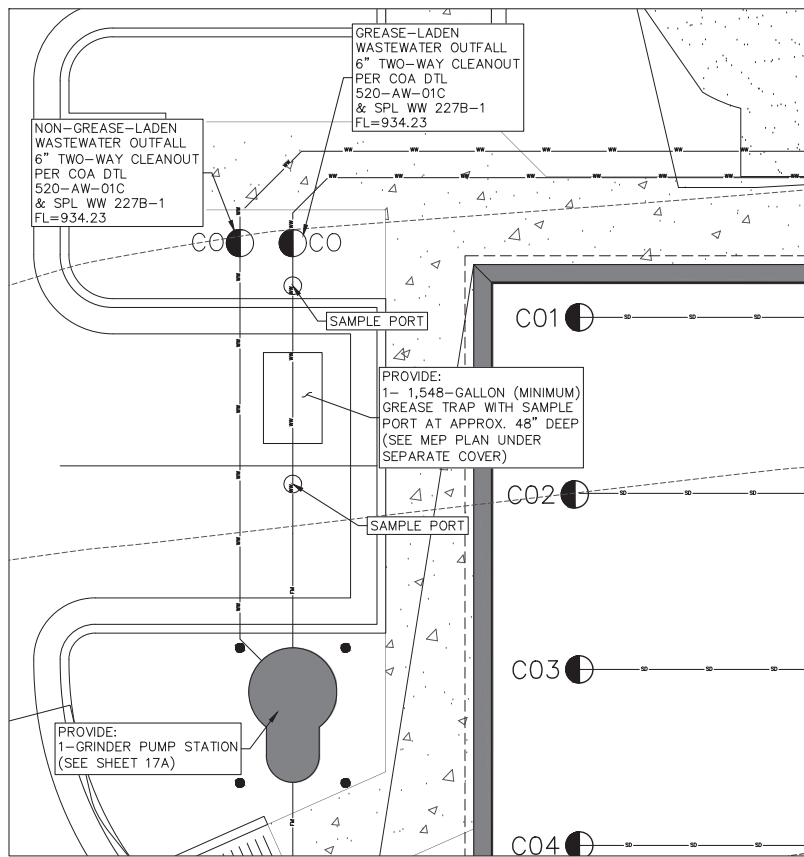
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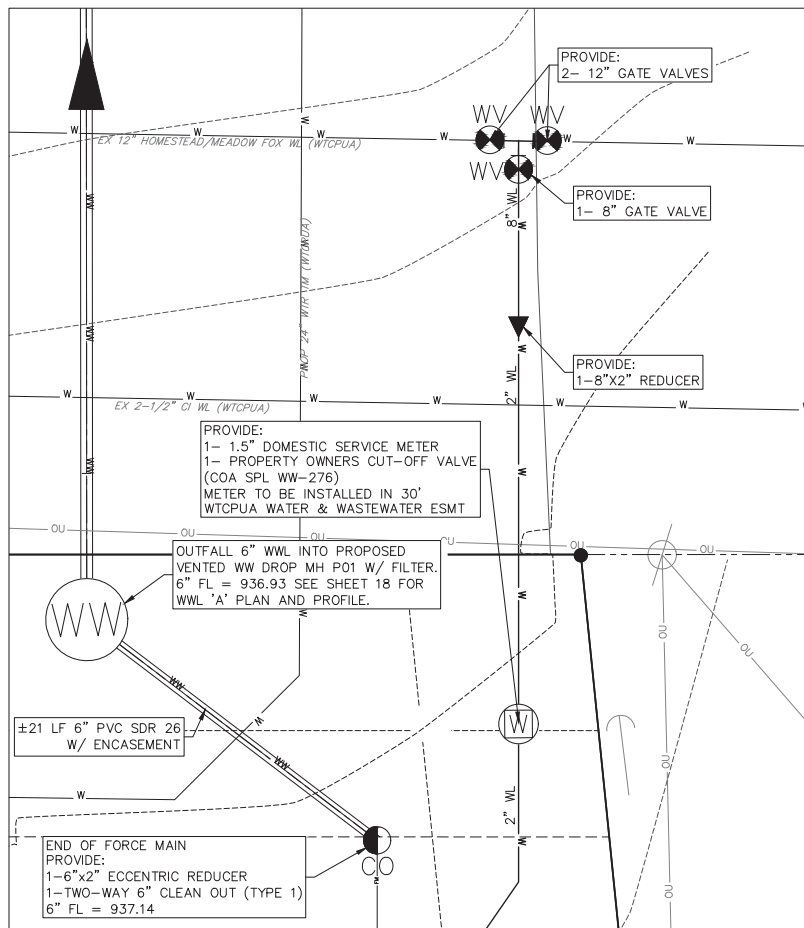
PROJECT NUMBER 00323-001	DATE 4/5/2024	DESIGNED BY KKE	CHECKED BY JTW
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SHEET NO.  
16 OF 41

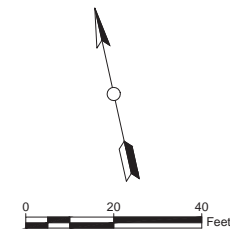
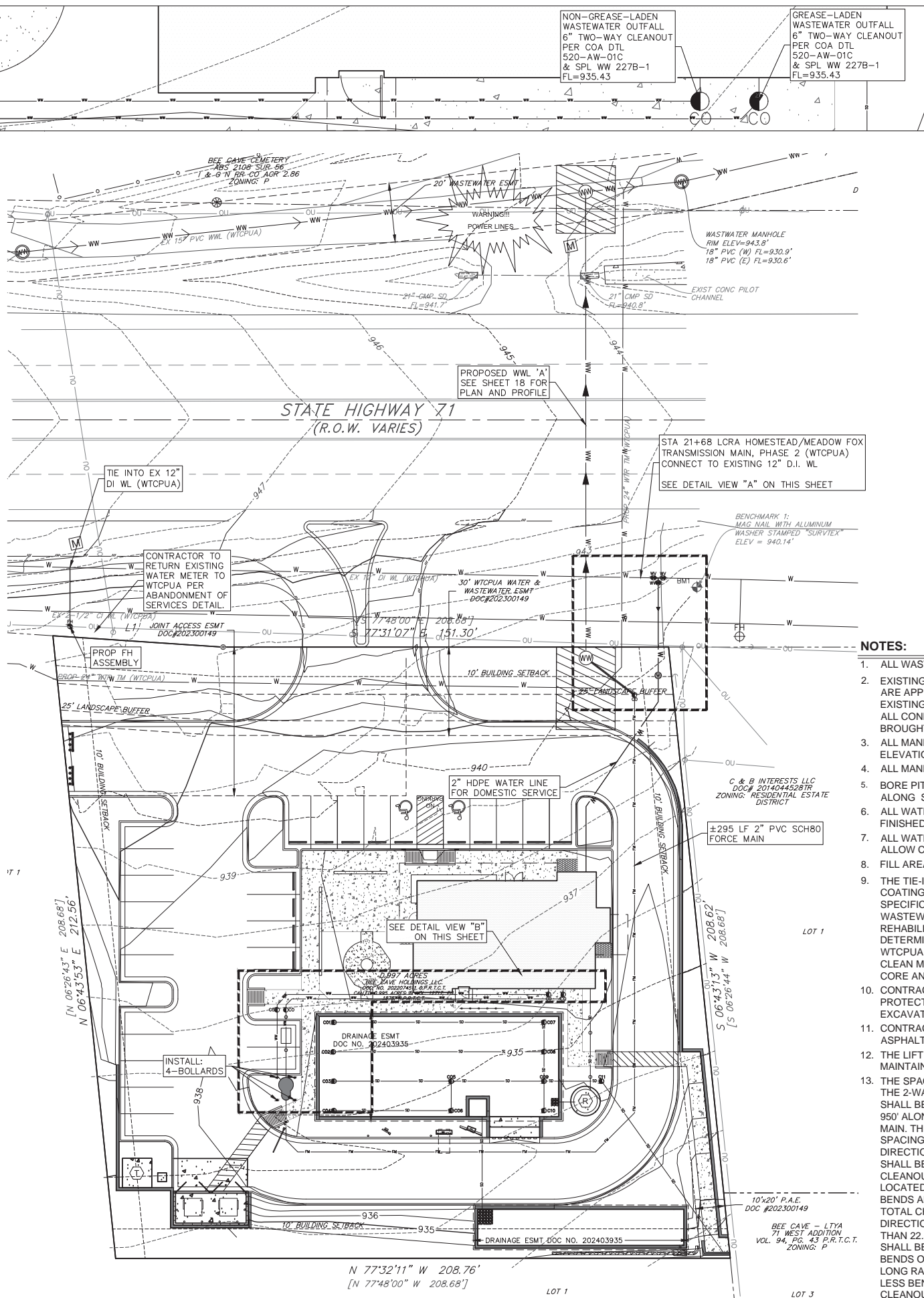
23-789-SNPS



**DETAIL VIEW "B"**  
SCALE: 1" = 5'



**DETAIL VIEW "A"**  
SCALE: 1" = 5'



**LEGEND**

---	SUBJECT TRACT PROPERTY LINE
- - -	ADJOINER TRACT PROPERTY LINE
---	EXISTING EOP
---	EXISTING OVERHEAD POWER LINE
○	EXISTING POWER POLE
⊖	EXISTING GUY ANCHOR
○	EXISTING TREE
⊕	EXISTING FIRE HYDRANT
---	CURB AND GUTTER
W	PROPOSED WATER LINE
WW	PROPOSED WASTEWATER LINE
SD	PROPOSED STORM DRAIN LINE
WV	PROPOSED WATER VALVE
WM	PROPOSED WATER METER
WMH	PROPOSED WASTEWATER MANHOLE
CO	PROPOSED WASTEWATER CLEANOUT
T	TRANSFORMER
R	RAINWATER TANK

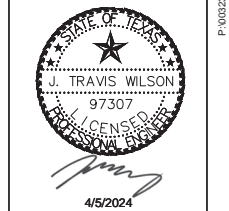
- NOTES:**
- ALL WASTEWATER LINES TO BE PVC, SDR26, ASTM D3034.
  - EXISTING UTILITY LOCATIONS AND CROSSINGS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND CROSSINGS PRIOR TO CONSTRUCTION. ALL CONFLICTS WITH INFORMATION SHOWN IN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER IMMEDIATELY.
  - ALL MANHOLES NOT BENEATH PAVEMENT SHALL BE BOLTED AND HAVE A RIM ELEVATION TWO INCHES ABOVE ADJACENT GRADE.
  - ALL MANHOLES SHALL HAVE CONCENTRIC CONES.
  - BORE PITS SHALL BE LOCATED A MINIMUM OF 16' FROM EDGE OF PAVEMENT ALONG SH 71.
  - ALL WATER LINE SHALL HAVE A MINIMUM OF FOUR (4) FEET OF COVER FROM FINISHED GRADE.
  - ALL WATER SERVICE LINES SHALL BE HDPE BLACK PIPE. WTCPUA DOES NOT ALLOW COPPER SERVICE PIPES.
  - FILL AREAS OUTSIDE PAVEMENT TO BE COMPACTED TO 95%.
  - THE TIE-IN TO EXISTING WASTEWATER MANHOLE AND ALL MANHOLE COATINGS SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN SPECIFICATIONS. ALL WASTEWATER CONNECTIONS TO EXISTING WASTEWATER MANHOLES SHALL MEET WASTEWATER MANHOLE REHABILITATION REQUIREMENTS. THESE REQUIREMENTS MUST BE DETERMINED PRIOR TO ANY CONNECTION. CONTRACTOR SHALL NOTIFY WTCPUA PRIOR, TO MAKE WASTEWATER CONNECTION. CONTRACTOR SHALL CLEAN MANHOLE TO ALLOW INSPECTION BY PUA. CONTRACTOR SHALL CORE AND BOOT PROPOSED CONNECTION AND RECOAT MANHOLE.
  - CONTRACTOR IS REQUIRED TO PROVIDE ENGINEER SUPPORT PLAN TO PROTECT EXISTING WATER LINES WHEN SAID LINES ARE WITHIN 5 FEET OF EXCAVATION AND WHEN EXCAVATION CROSSES WATER LINES.
  - CONTRACTOR SHALL REPAIR/RESTORE EXISTING CONCRETE AND/OR ASPHALT PAVING AND RIPRAP TO EXISTING CONDITION AS NECESSARY.
  - THE LIFT STATION VALVE VAULT, AND GREASE TRAP ARE TO BE PRIVATELY MAINTAINED.
  - THE SPACING BETWEEN THE 2-WAY CLEANOUTS SHALL BE NO MORE THAN 95' ALONG THE FORCE MAIN. THE MAXIMUM SPACING FOR SINGLE DIRECTION CLEANOUTS SHALL BE 475'. CLEANOUTS SHALL BE LOCATED AT SHARP BENDS AND PRIOR TO TOTAL CHANGE IN DIRECTION GREATER THAN 22.5°. ALL BENDS SHALL BE SWEEPING BENDS OR MADE UP OF A LONG RADIUS 45° OR LESS BENDS. ALL CLEANOUT LIDS SHALL BE TRAFFIC RATED.

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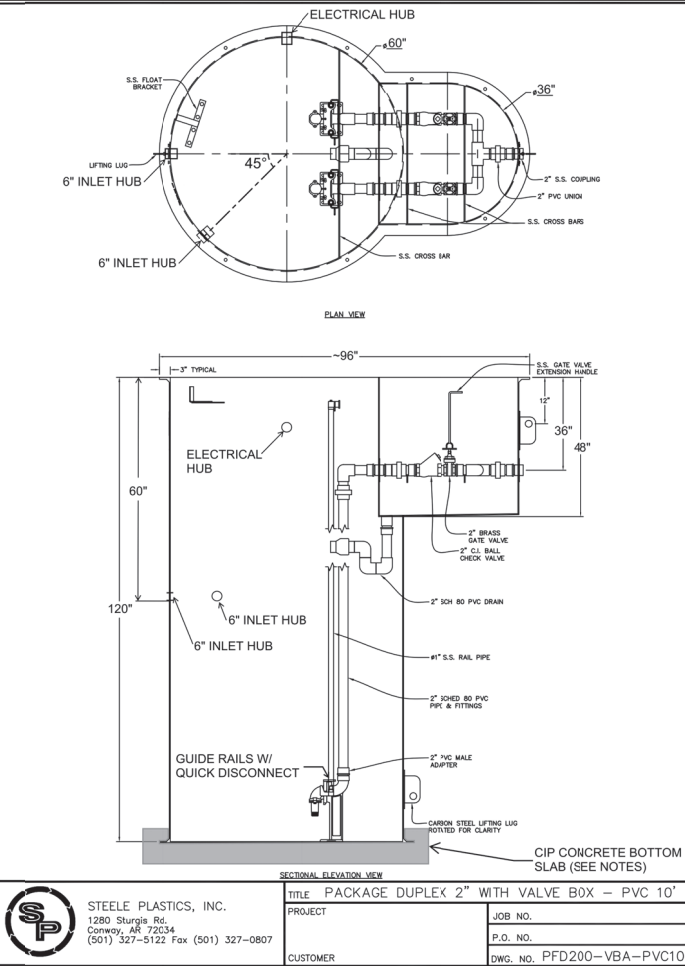
**UTILITY PLAN**

PROJECT NUMBER	REVISIONS/CORRECTIONS		DATE	BY
	NO.	DESCRIPTION		
00323-001				
DATE:	4/5/2024			
DESIGNED:	KKE			
CHECKED:	JTW			

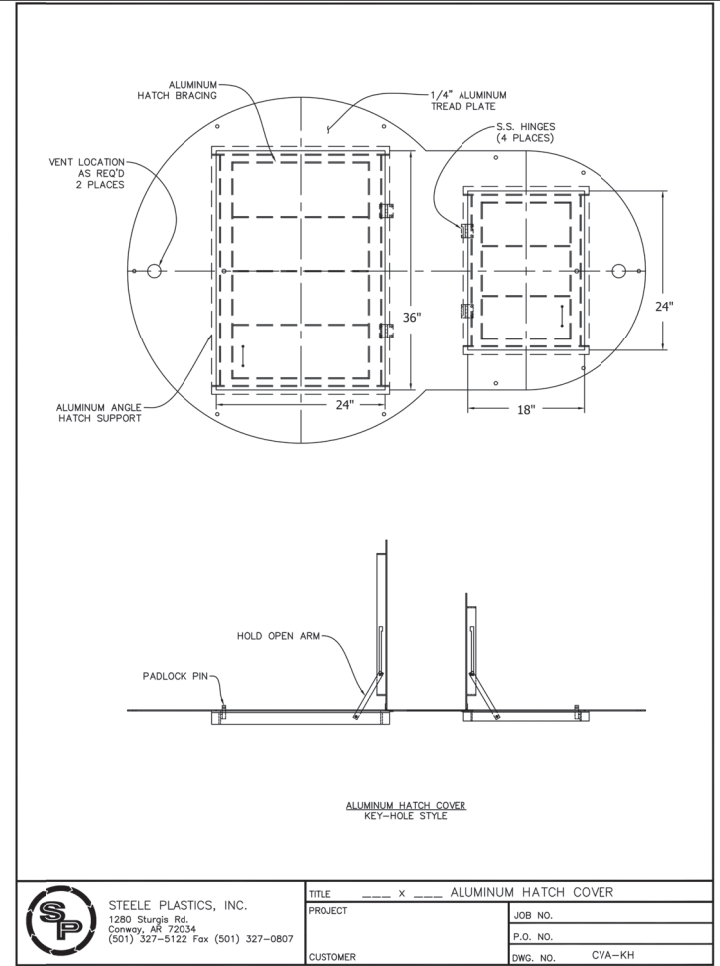
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**23-789-SNPS**

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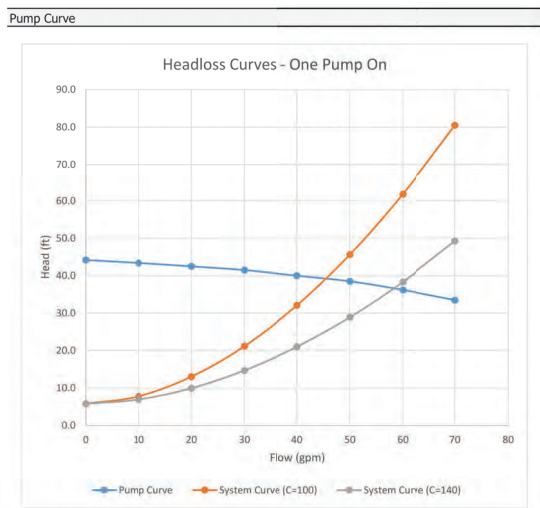


STEELE PLASTICS, INC. 1280 Sturgis Rd. Conway, AR 72034 (501) 327-5122 Fax (501) 327-0807	TITLE	PACKAGE DUPLEX 2" WITH VALVE BOX - PVC 10"		
	PROJECT	JOB NO.		
	CUSTOMER	P.O. NO.		
		DWG. NO.	PFD200-VBA-PVC10	



STEELE PLASTICS, INC. 1280 Sturgis Rd. Conway, AR 72034 (501) 327-5122 Fax (501) 327-0807	TITLE	ALUMINUM HATCH COVER		
	PROJECT	JOB NO.		
	CUSTOMER	P.O. NO.		
		DWG. NO.	CVA-KH	

Project Starbucks Grinder Station  
 Client Investor  
 Prj No 00323-001  
 Date 3/20/2024  
 By RY/SS  
 Title Lift Station Design



CONTROL ELEVATIONS

Top of Lid =	938.20	ft
8" Invert =	933.20	ft
High Level Alarm =	933.00	ft
Lag Pump On =	932.70	ft
Lead Pump On =	931.70	ft
Pumps Off =	929.70	ft
Bottom of Wet Well =	928.20	ft
Total Well Depth (Dw) =	10.00	ft
Cycle Time (θ) =	6.00	min
Pump Capacity (Q) =	50.00	gpm

**EBARA Submersible Grinder Pumps (residential / commercial) EBG, EBHG**  
**Specifications - 3, 5, 7.5 10 HP**

**Pump Model:**  
 Pump shall be of the centrifugal type with an integrally built-in grinder unit and submersible type motor. The grinder unit shall be capable of macerating all material in normal domestic and commercial sewage, including reasonable amounts of foreign objects such as sanitary napkins, disposable diapers, thin rubber, small wood, plastic and the like to a fine slurry that easily pass through the pump and 2" discharge pipe. Discharge shall be standard with slotted bolt pattern to accommodate either a 2.5" or 3" 150 lb. ANSI flange.

**Operating Conditions:**  
 The pump shall have a capacity of 50 GPM at a total head of 46 feet, and shall use a motor rated at 3 HP and 3450 RPM.

**Pump Impeller:**  
 Cast brass and threaded on a stainless steel shaft. The impeller shall be of the recessed vortex type to provide an unobstructed passage through the volute for the ground solids.

**Grinder Construction:**  
 Both grinder impellers and shredding ring shall be of 440C stainless steel hardened to 56-60 Rockwell C. The grinder assembly shall consist of a grinder impeller and shredding ring mounted directly below the volute passage. The grinder impeller is threaded to a stainless steel shaft, locked with a screw and washer. The shredding ring shall be pressed into an iron holding flange for easy removal. The flange shall be provided with tapped back-off holes so screws can be used to push the shredding ring from the housing. All grinding of solids shall be from the action of the grinder impeller against the shredding ring.

**Seals:**  
 Type 21, dual mechanical seal construction mounted in tandem, shall protect the motor. Primary seal shall be silicon / carbide. Secondary seal shall be silicon / carbide. The seal face shall be lapped to a flatness of one light band. A double electrode shall be mounted in the seal chamber to detect water entering the chamber through the lower seal. Water in the chamber shall cause a red light to turn on at the control box. This signal shall not stop the motor, but shall act as a warning only, indicating service is required.

**Motor:**  
 The pump motor shall be of the submersible type, rated 3 HP, 3450 RPM. The motor shall be for 60 Hz, ~~either 208, 230 or 460~~ volt, single ~~or three~~ phase operation. Major operating temperature must not exceed Class B ratings.

The stator winding shall be of the open type with Class F insulation. Winding housing shall be filled with clean, high dielectric oil that lubricates bearings and seals, transferring heat from windings and rotor to the outer cast housing.

An upper motor bearing cap shall be a separate casting for easy mounting and replacement. The motor shall have two heavy-duty ball bearings to support the pump shaft, taking radial and thrust loadings. A sleeve guide bushing is mounted directly above the lower seal to take radial load and act as a flame path for the seal chamber. Ball bearings shall be designed for a minimum 50,000 hours B-10 life. The stator shall be pressed into the motor housing. The common motor pump and grinder shaft shall be of 416 SST, threaded to take the pump and grinder impeller.

Motors shall have a heat sensor thermostat attached to the top end of the motor windings to stop the motor if the motor winding temperature reaches 200 degrees F. The high temperature shut-off will cause the pump to cease operation, should a control failure cause the pump to run in a dry wet well. The thermostat shall automatically reset when the motor cools to a safe operating temperature.

**Power Cord:**  
 The motor power cord shall be 10 Ga. SOW/SOWA or SOOW. The cable jacket shall be sealed at the motor entrance by means of a rubber compression washer and compression nut. An epoxy filled tube shall seal the outer cable jacket and individual leads to prevent water from entering the motor housing. Individual conductor strands shall be soldered within the epoxy seal. Cords shall withstand a pull of 300 pounds.

**EBARA Submersible Grinder Pumps (residential / commercial) EBG, EBHG**  
**Electrical Data**

Project: \_\_\_\_\_ Model: \_\_\_\_\_ Chk'd: \_\_\_\_\_ Date: \_\_\_\_\_

**Model EBG, EBHG**  
**2, 3, 5, 7.5 HP, 60Hz, Single Phase, 208, 230V**

Name-Plate Rating	Item No.	2	3	5	7 1/2
Output (HP)		2	3	5	7 1/2
Phase		1	1	1	1
Poles		2	2	2	2
Volts		208 / 230	208 / 230	208 / 230	230
Amperes		15.5 / 12.8	9.7 / 3.4	4.4 / 4.0	4.7
Speed		3450	3450	3450	3450
Insulation Class		F	F	F	F
Capacitor μF	Start	150	274 - 324	274 - 324	274 - 324
	Run	30	30	30	30
Resistance at 20°C OHMS	Main Coil	1.8	.3	.3	.3
	Aux. Coil	5.1	.8	.8	.8
Start Current A	28 / 25	185 / 170	220 / 200	235	
Service Factor		1.59	3.96	2.37	1.4

**GRINDER PUMP STATION NOTES**

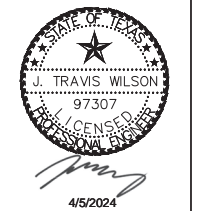
- CONTRACTOR SHALL FURNISH AND INSTALL A PACKAGED DUPLEX GRINDER PUMP STATION FROM MANSFIELD PUMP COMPANY, NEW BRAUNFELS, TEXAS, (210) 964-5999.
- WET WELL SHALL BE FIBERGLASS WITH INTEGRAL VALVE VAULT IN A KEYHOLE OR FIGURE EIGHT CONFIGURATION.
- WET WELL & VALVE VAULT SHALL CONTAIN ALL NECESSARY INLETS, OUTLETS, GUIDE RAILS, PIPING, VALVES, HATCHES, AND APPURTENANCES.
- PUMPS SHALL BE MANUFACTURED BY EBARA WITH THE FOLLOWING CHARACTERISTICS:
  - FLOW = 50 GPM
  - HEAD = 46 FT
  - MODEL = EBG-31
  - IMPELLER = 3.75" DIA.
  - MOTOR = 3 HP
  - PHASE = SINGLE
  - VOLTAGE = 230 V
- A PUMP CONTROL PANEL SHALL BE PROVIDED IN A NEMA 4X WITH AUTOMATIC OPERATION, ALTERNATING PUMPS, AUDIO-VISUAL ALARM, FLOATS, AND ALL NECESSARY APPURTENANCES.
- VAULT AND WET WELL SHALL HAVE PVC VENTS WITH ACTIVATED CARBON INSERTS FOR THE CONTROL OF ODOR.
- CIP CONCRETE BOTTOM SLAP SHALL HAVE THE FOLLOWING CHARACTERISTICS:
  - CONCRETE CLASS: TXDOT OR COA CLASS C.
  - CONCRETE THICKNESS UNDER WET WELL: 9"
  - CONCRETE TOTAL THICKNESS: 12" (INCL. 3" EMBEDMENT AROUND FLANGE)
  - REBAR SIZE: NO. 5
  - REBAR SPACING: 16" O.C.E.W.
  - CONCRETE WIDTH: 12" BEYOND WETWELL OUTER DIAMETER
  - REBAR CLEAR COVER: 2"



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 14211 STATE HWY 71, BEE CAVE, TEXAS 78738  
 GRINDER PUMP STATION  
 DETAILS

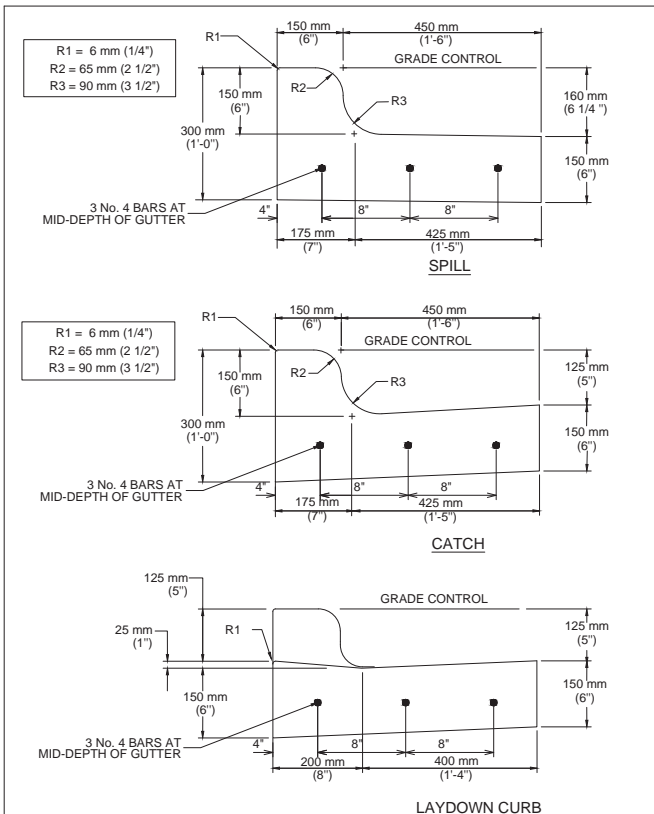
PROJECT NUMBER	DATE	DESIGNED	CHECKED	REVISIONS / CORRECTIONS	
				NO.	DESCRIPTION
00323-001	4/5/2024	KKE	JTW		



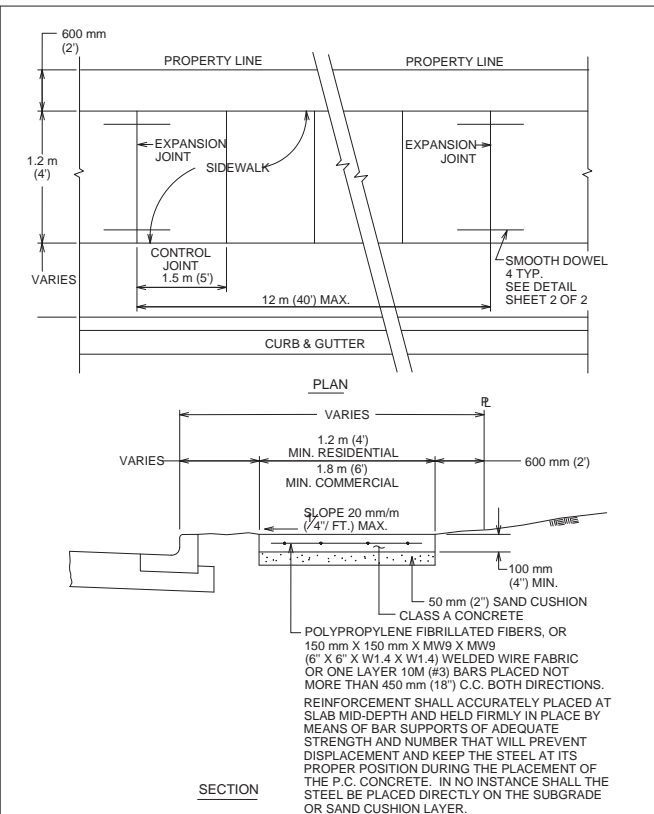




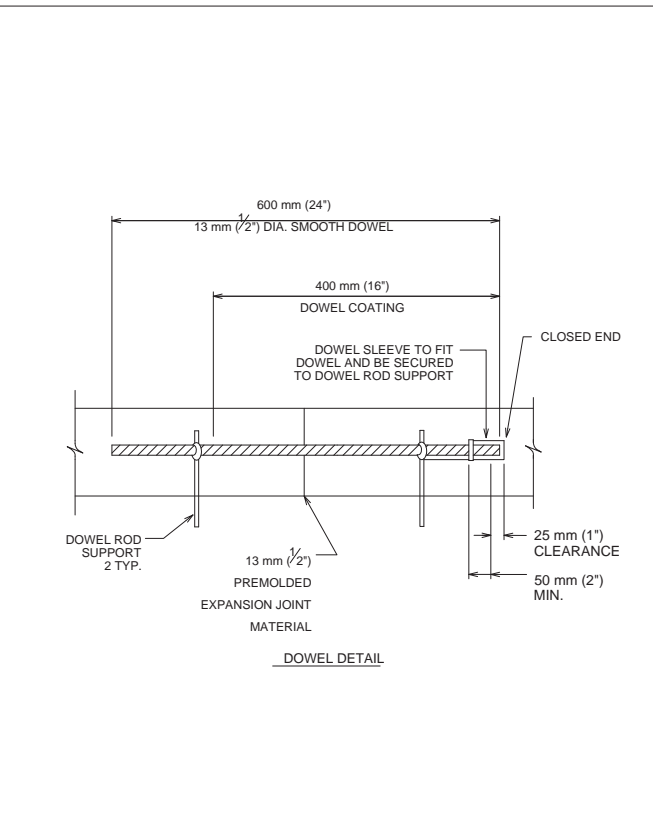




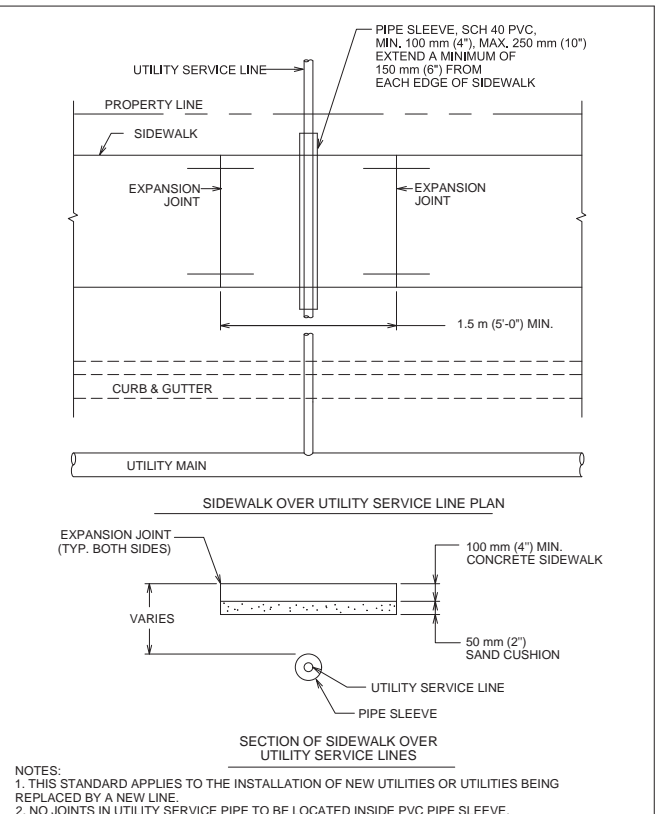
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	REINFORCED CURB AND GUTTER SECTION	STANDARD NO. <b>430S-2</b>
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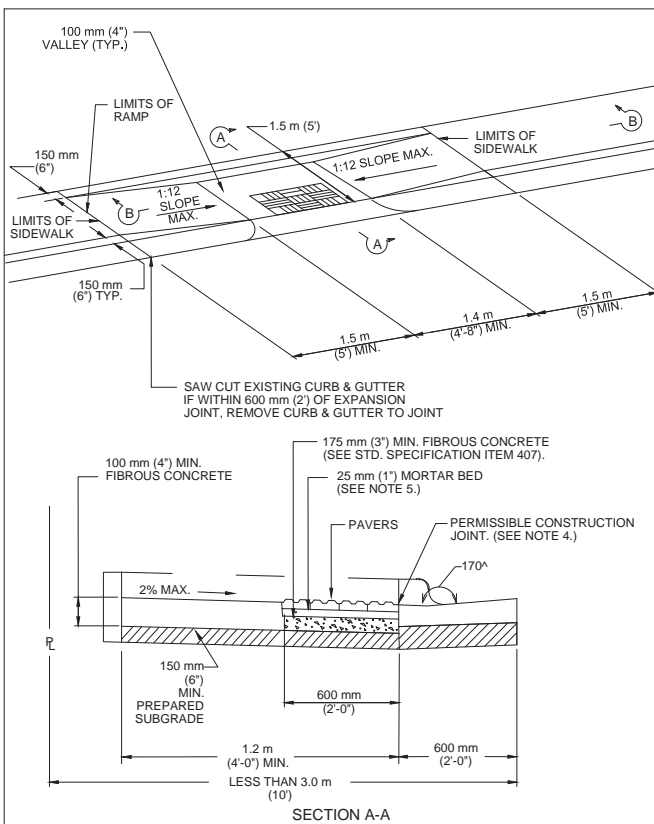
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	STANDARD NO. <b>432S-1</b>
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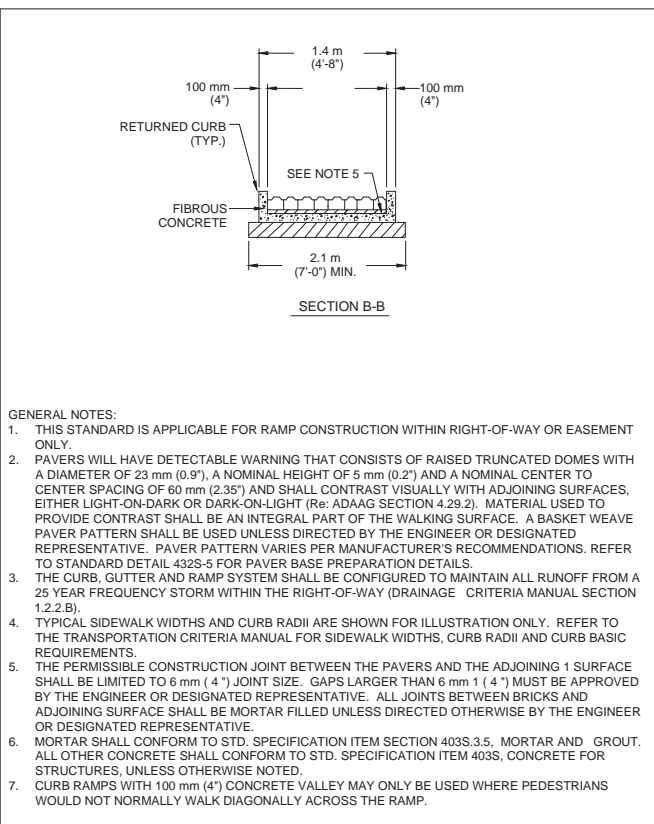
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RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



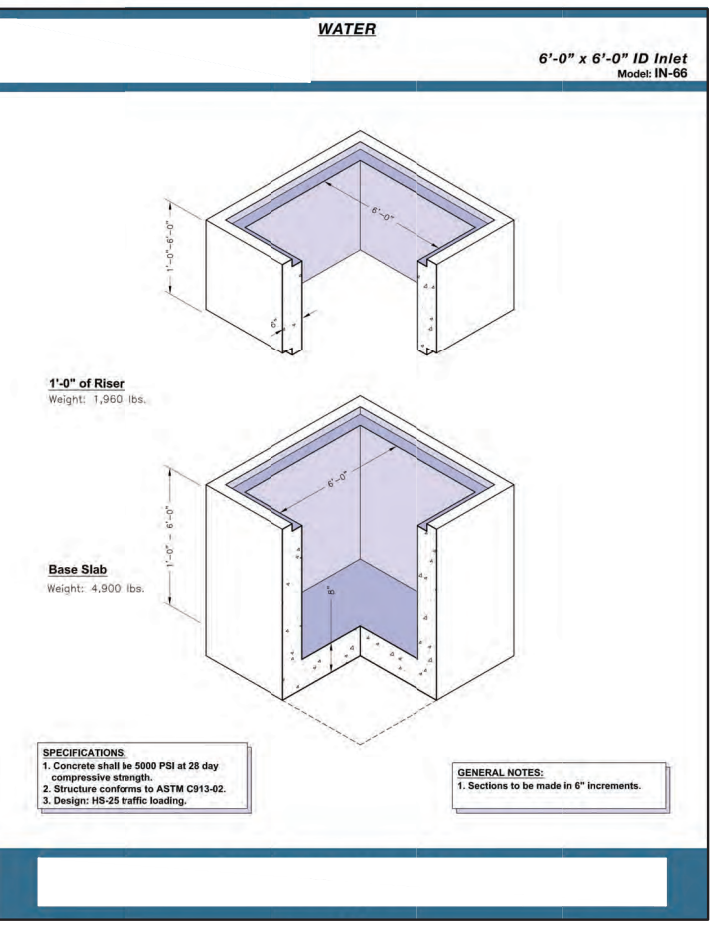
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	STANDARD NO. <b>432S-1</b>
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	COMBINED SIDEWALK CURB RAMP WITH PAVERS WITHIN LIMITED ROW ONLY	STANDARD NO. <b>432S-3G</b>
RECORD COPY SIGNED BY BILL GARDNER	06/21/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	COMBINED SIDEWALK CURB RAMP WITH PAVERS WITHIN LIMITED ROW ONLY	STANDARD NO. <b>432S-3G</b>
RECORD COPY SIGNED BY BILL GARDNER	06/21/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

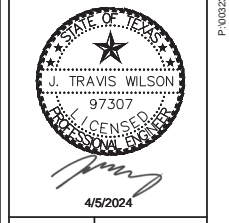


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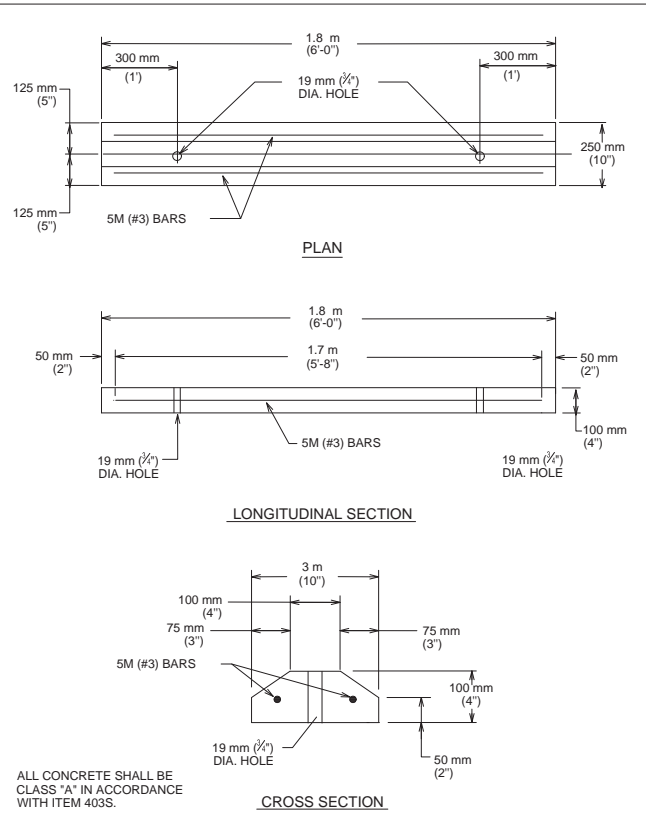
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**STANDARD DETAILS**  
2 OF 10

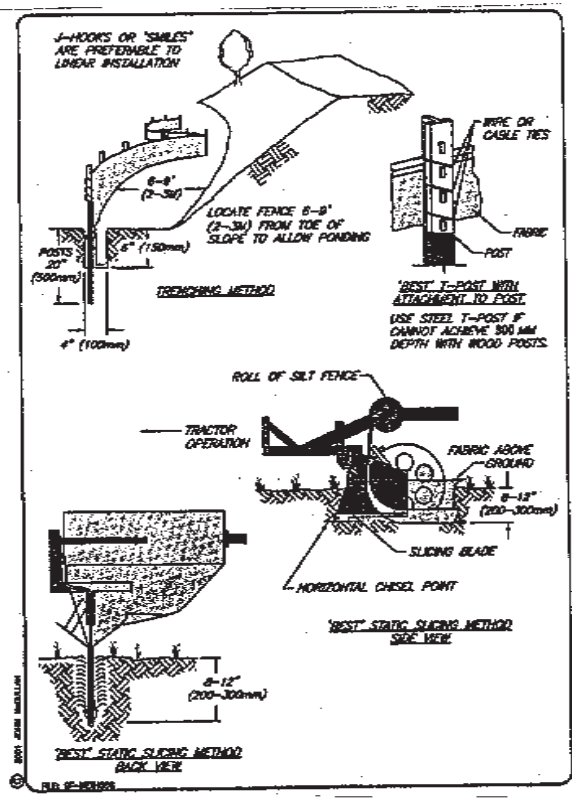
PROJECT NUMBER	REVISIONS / CORRECTIONS		DESIGNED: KKE	CHECKED: JTW
	NO.	DATE		
00323-001				

**SHEET NO.**  
21 OF 41

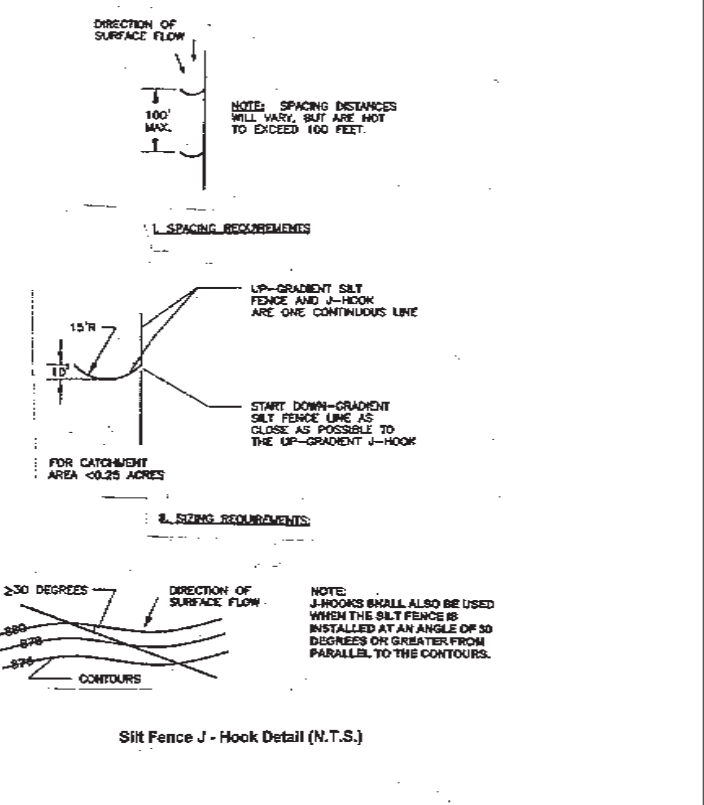
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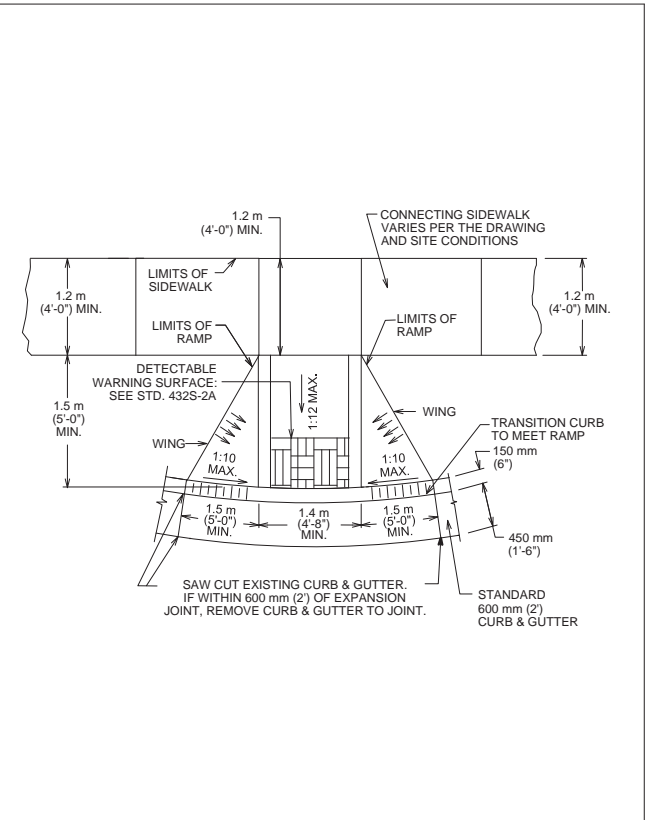
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RECORD COPY SIGNED BY BILL GARDNER	3/15/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 439S-1
APPROVED	ADOPTED		



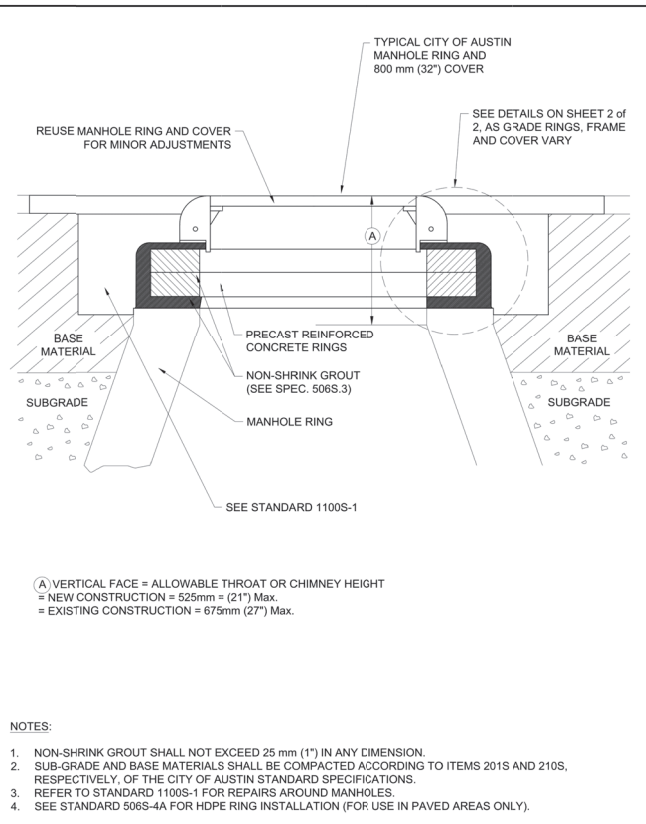
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		PARKING LOT BUMPER CURB	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-4 1 OF 2
APPROVED	ADOPTED		



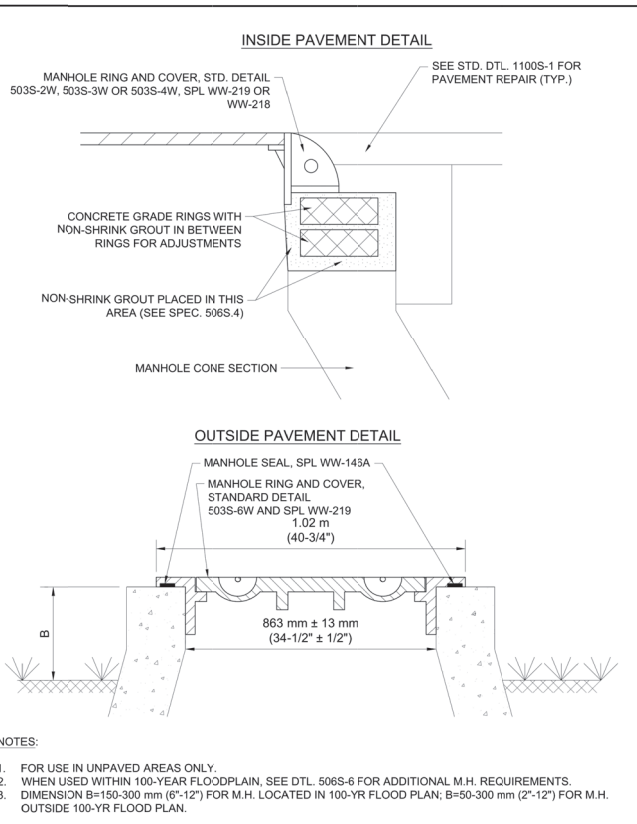
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RECORD COPY SIGNED BY BILL GARDNER	9/14/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-5
APPROVED	ADOPTED		



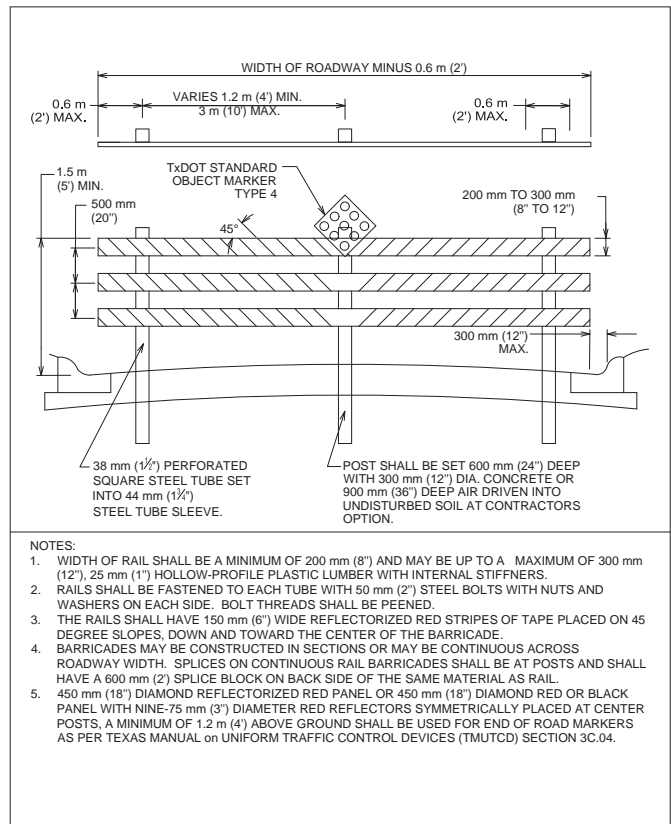
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE 1 SIDEWALK CURB RAMP	
RECORD COPY SIGNED BY BILL GARDNER	9/14/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-5
APPROVED	ADOPTED		



CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-4 1 OF 2
APPROVED	ADOPTED		

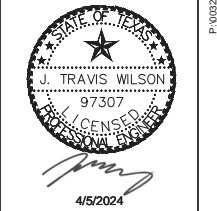


CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-4 2 OF 2
APPROVED	ADOPTED		



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		STREET-END BARRICADE	
RECORD COPY SIGNED BY BILL GARDNER	03/12/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 803S-1
APPROVED	ADOPTED		

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**STANDARD DETAILS**  
 3 OF 10

REVISIONS / CORRECTIONS	
NO.	DESCRIPTION

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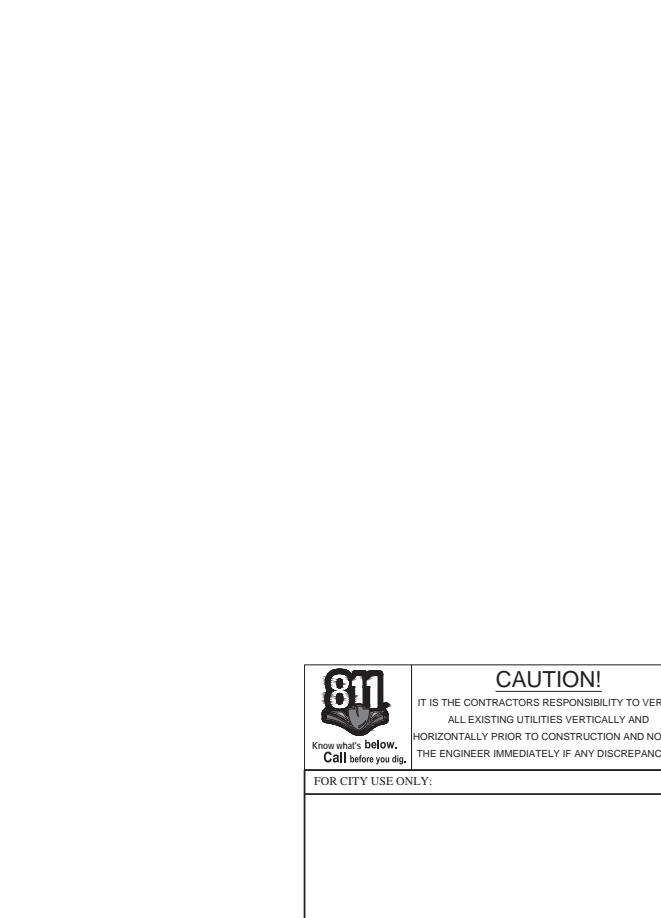
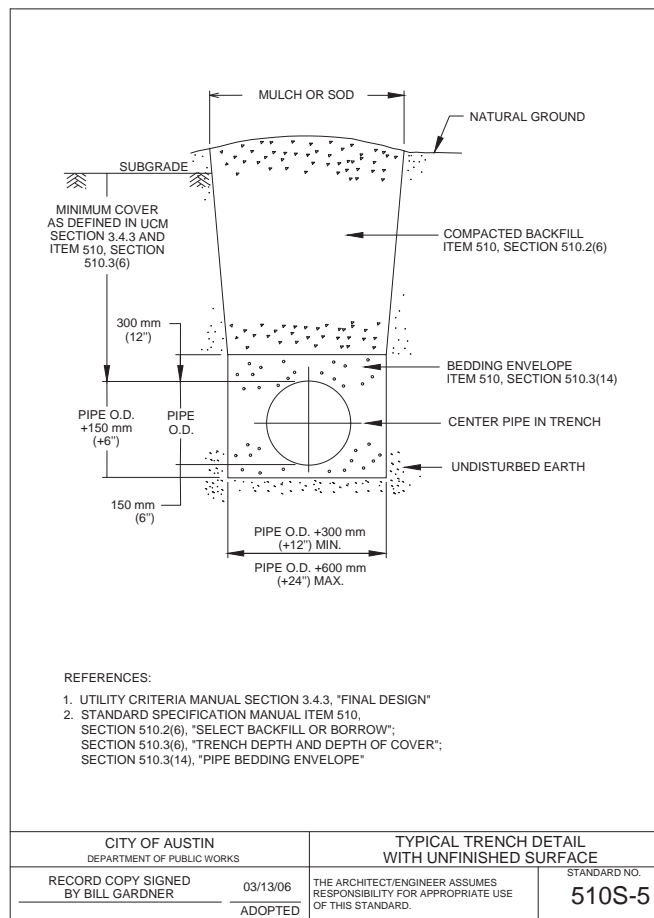
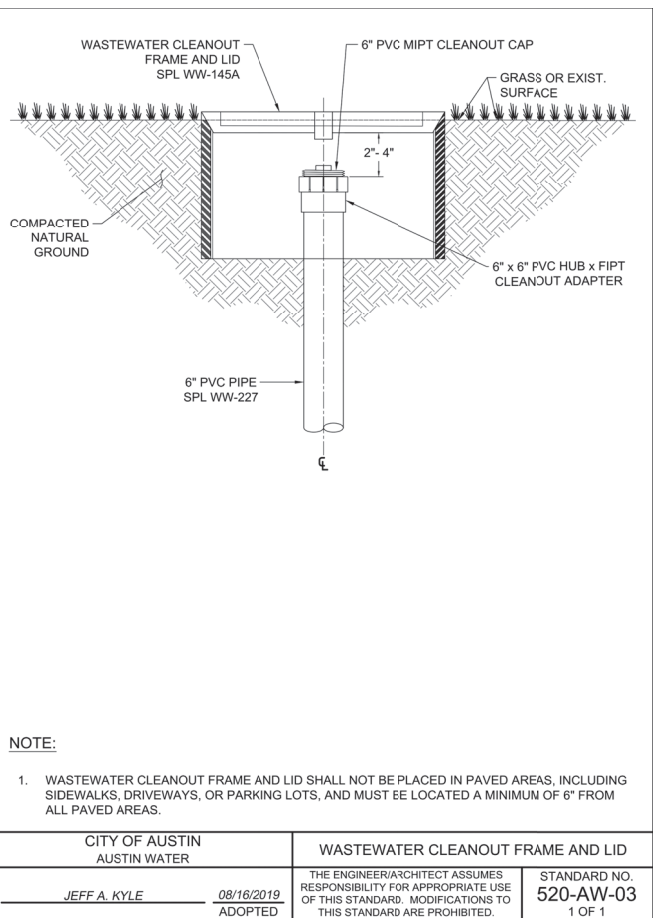
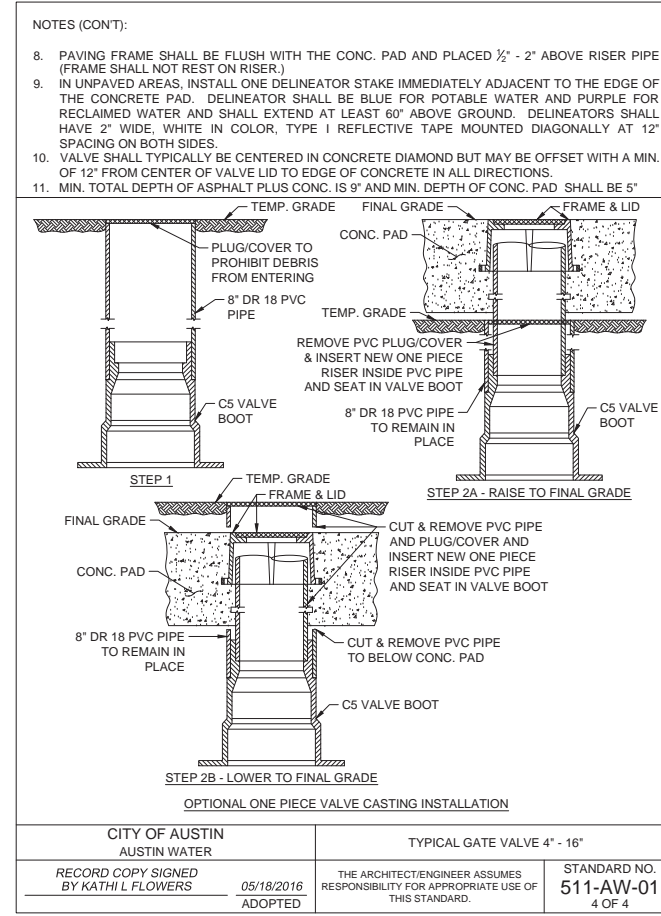
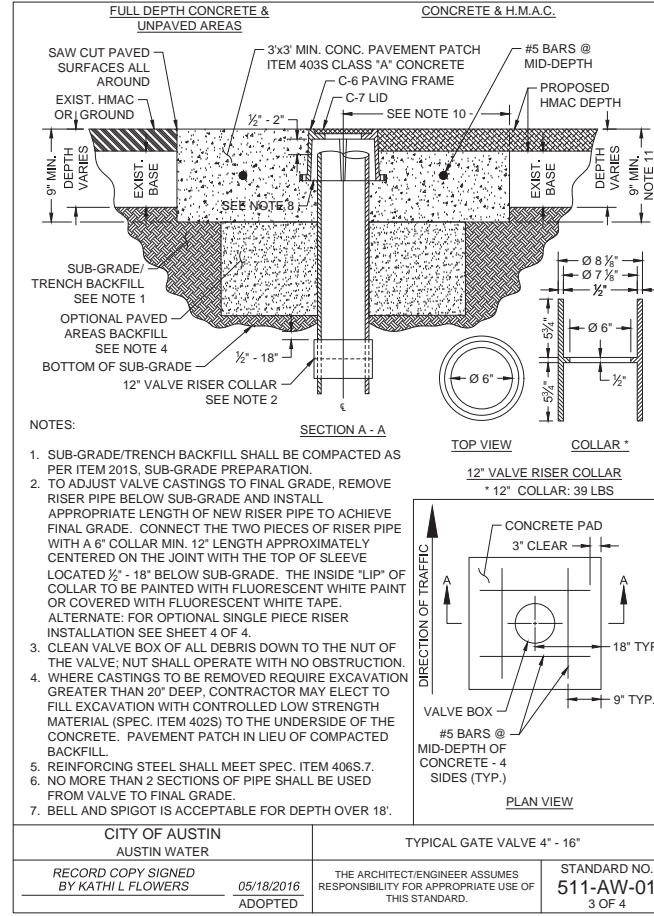
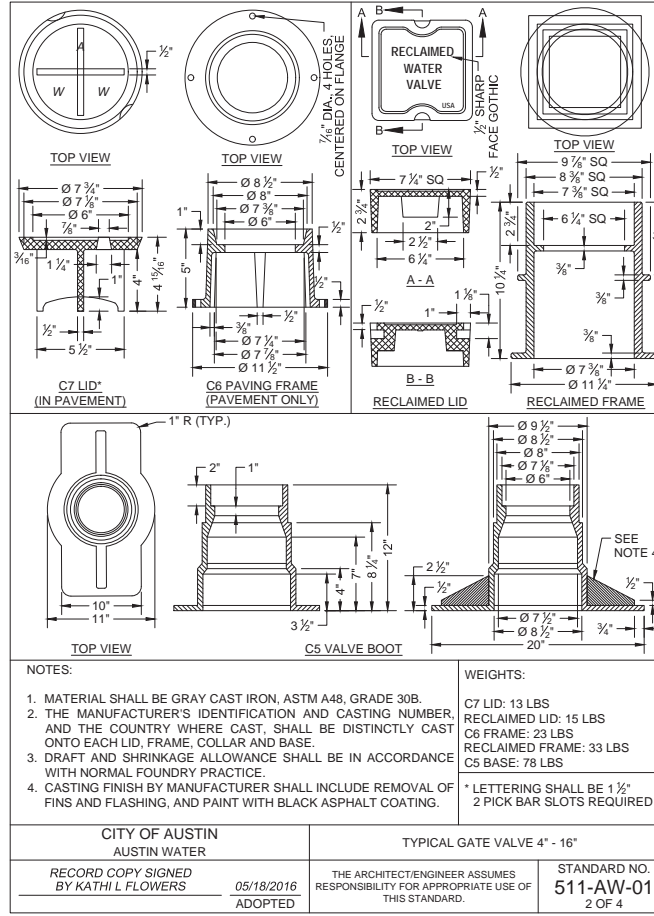
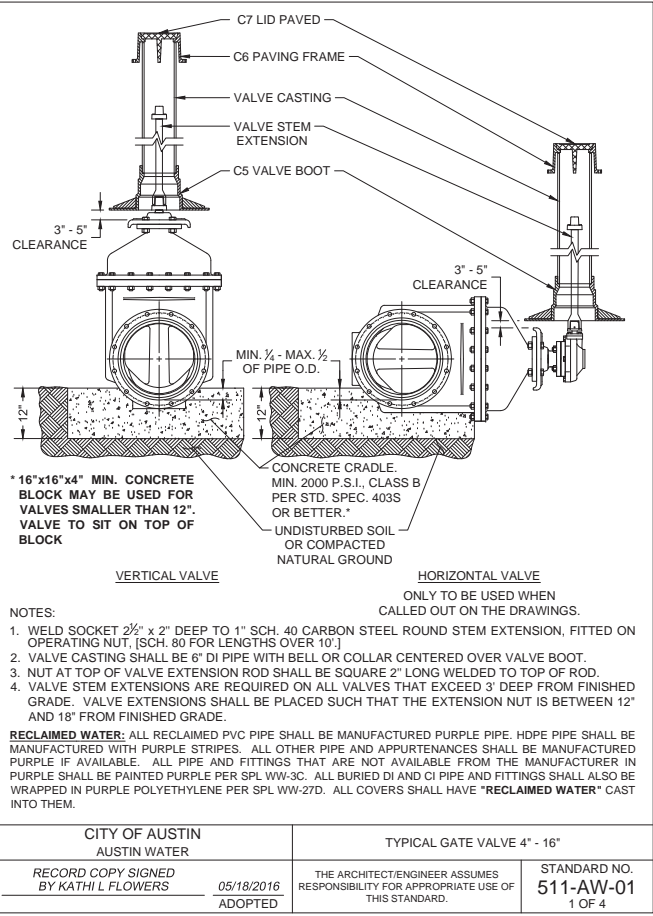
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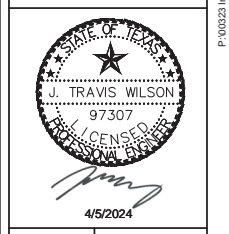
PROJECT NUMBER: 00323-001  
 DATE: 4/5/2024  
 DESIGNED: KKE  
 CHECKED: JTW

PROJECT NUMBER	00323-001
DATE	4/5/2024
DESIGNED	KKE
CHECKED	JTW

SHEET NO. 22 OF 41  
 23-789-SNPS



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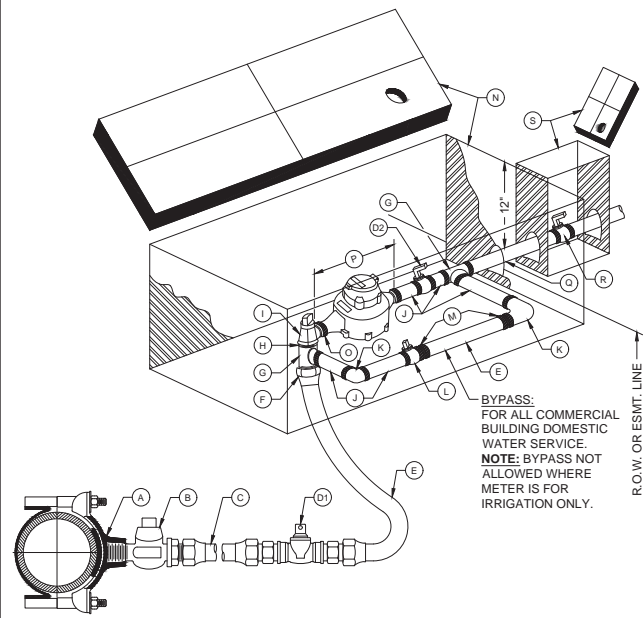
**STANDARD DETAILS**  
4 OF 10

PROJECT NUMBER 00323-001	DATE:	DESIGNED:	CHECKED:
	4/5/2024	KKE	JTW
SHEET NO. 23 OF 41			
23-789-SNPS			

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CITY OF AUSTIN AUSTIN WATER	1 1/2" - 2" METER INSTALLATION SHOWING OPTIONAL BYPASS	STANDARD NO. 520-AW-04 1 OF 2
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

- MATERIALS LIST:**
- A. 2" SERVICE CLAMP
  - B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET
  - C. 2" COPPER WATER SERVICE TUBING EXTENDED BEYOND PAVEMENT
  - D1. 2" BALL VALVE, SPL WW-275
  - D2. 2" BALL VALVE, SPL WW-275
  - E. 2" COPPER SERVICE TUBING
  - F. 2" BRASS COUPLING - COMPRESSION TO MALE IPT
  - G. 2" BRASS TEE
  - H. 2" BRASS CLOSE-NIPPLE
  - I. 2" ANGLE METER STOP; SERVICE TUBING INLET x FLANGED OUTLET
  - J. 2" BRASS NIPPLE
  - K. 2" BRASS ELBOW
  - L. 2" LOCKABLE CURB STOP - FEMALE IPT INLET BY COMPRESSION OUTLET
  - M. 2" BRASS COUPLING - SERVICE TUBING TO MALE IPT
  - N. RECTANGULAR METER BOX AND COVER, SPL WW-145A
  - O. BRASS ADAPTER (2" x 1 1/2") FOR 1 1/2" METER ONLY
  - P. WATER METER, LENGTH 13", (PURCHASED FROM AUSTIN WATER)
  - Q. 2" COPPER SERVICE TUBING (PRIVATE PLUMBING PER CODE)
  - R. CUSTOMER CUT-OFF VALVE
  - S. CUSTOMER VALVE BOX AND LID

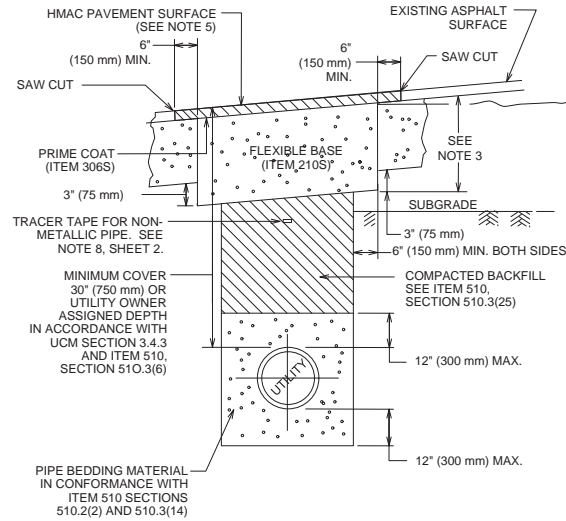
- NOTES:**
- SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
  - BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
  - TOP OF BOXES SHOULD BE 1" ABOVE GROUND.
  - PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS; BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
  - BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.
  - BALL VALVE "D1" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 24" HORIZONTALLY FROM METER BOX OR 36" BELOW FINAL GRADE.
  - COPPER SERVICE SHALL BE COPPER TUBING SIZE ANNEALED SEAMLESS TYPE "K" MEETING ASTM B88 WITH NO SWEAT OR SOLDERED JOINTS.

**RECLAIMED WATER:**

FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED PURPLE TUBING. ALL OTHER TUBING AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL TUBING AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE "RECLAIMED WATER" CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	1 1/2" - 2" METER INSTALLATION SHOWING OPTIONAL BYPASS	STANDARD NO. 520-AW-04 2 OF 2
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

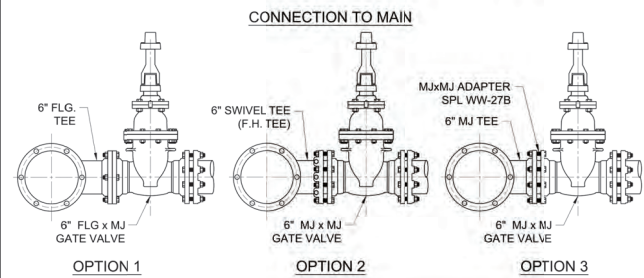
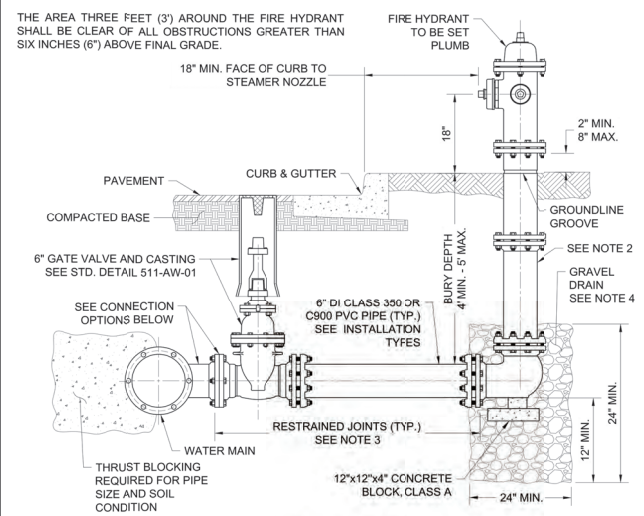
**TRENCH REPAIR IN ASPHALTIC SURFACE OVER FLEXIBLE BASE  
(UCM SECTION 5.8.0)**



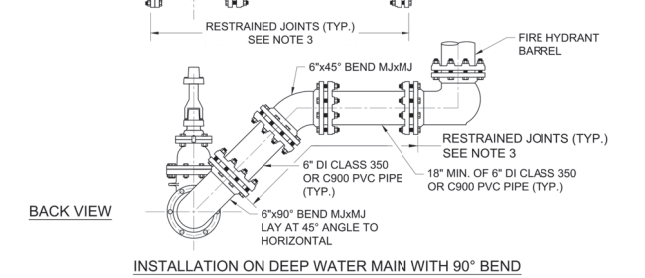
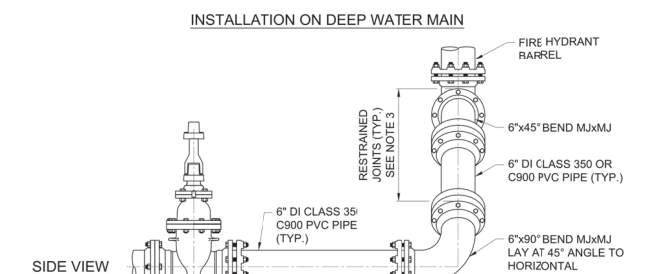
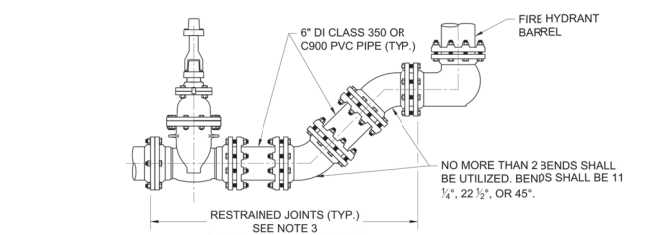
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	STANDARD NO. 1100S-2 1 OF 2
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

- NOTES:**
- THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" (300 mm) WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
  - IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMA. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
  - ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3" (75 mm), BUT IN NO CASE LESS THAN 12" (300 mm).
  - DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" (250 mm) OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
  - REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
    - MIN. 2" (50 mm) HMA TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
    - MIN. 3" (75 mm) HMA TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS. SEE ITEM 340S, SECTION 340S.4.
  - CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
  - TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 307S).
  - AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

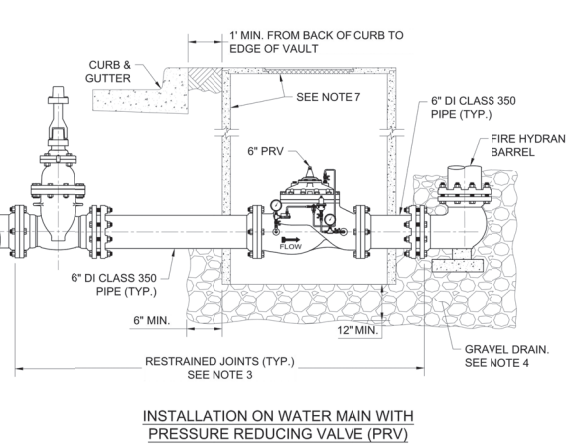
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	STANDARD NO. 1100S-2 2 OF 2
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	STANDARD NO. 511-AW-02 1 OF 3
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	STANDARD NO. 511-AW-02 2 OF 3
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



- NOTES: APPLICABLE TO ALL INSTALLATION TYPES.**
- NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6' OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMP.
  - ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' - 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
  - FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
  - BELOW EACH HYDRANT, A DRAINAGE PIT 24" IN DIAMETER AND 12" DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 12" ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC PER STD. SPEC. 620S. FOR PRV, GRAVEL SHALL EXTEND UNDER THE PRV VAULT 12" MIN. DEPTH UNDER THE VAULT AND 6" MIN. BEYOND VAULT.
  - FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLG x FLG REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
  - WRAP 8 MIL. POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
  - FOR HYDRANTS WITH PRV: CLASS III RCP VAULT 60" MIN. I.D. WITH REINFORCED PRECAST CONCRETE LID (AASHTO H-20 LOADING) WITH COA FRAME AND 32" COVER WITH LETTERING MODIFIED FOR WATER.

CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	STANDARD NO. 511-AW-02 3 OF 3
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.

**Water Meter Length and Total Length with Gaskets**

Description	Meter Length	With Gaskets
5/8" PB BL 3G	7.5" inches	7.75" inches
3/4" PB BL 3G	7.5" inches	7.75" inches
1" PB BL 3G	10.75" inches	11" inches
1.5" FLG MS 3G	13" inches	13.25" inches
2" FLG MS 3G	17" inches	17.25" inches
2" Octave Meter	10" inches	10.25" inches

**WTCPUA METER LENGTH DIMENSION DETAIL**

PROJECT NUMBER 00323-001	DATE: 4/5/2024	DESIGNED: KKE	CHECKED: JTW
BY	DATE	DESCRIPTION	
NO.			

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STATE OF TEXAS  
J. TRAVIS WILSON  
97307  
LICENSED  
4/5/2024

STARBUCKS BEE CAVE  
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

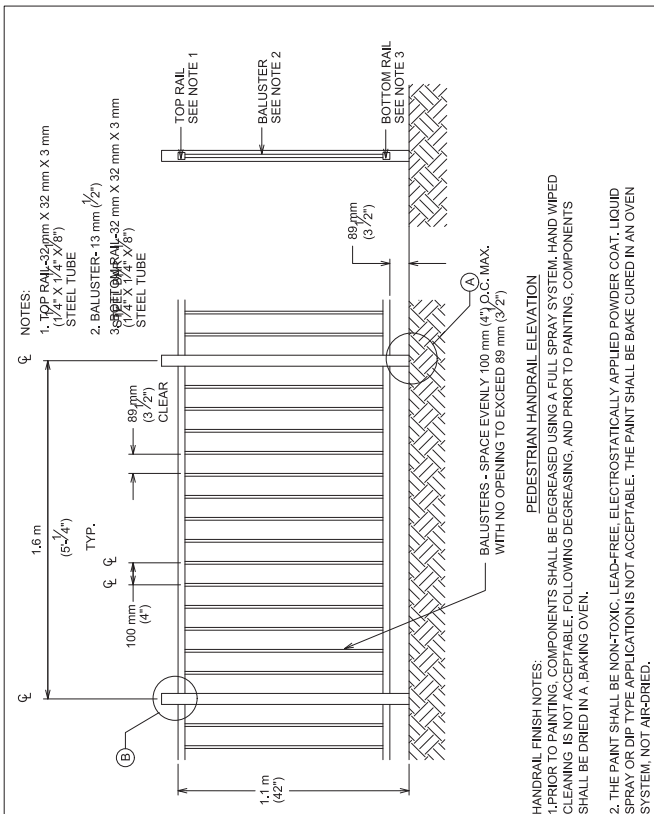
STANDARD DETAILS  
5 OF 10

REVISIONS/CORRECTIONS	BY	DATE	DESCRIPTION
NO.			
PROJECT NUMBER 00323-001	DATE: 4/5/2024	DESIGNED: KKE	CHECKED: JTW
SHEET NO. 24 of 41			
23-789-SNPS			

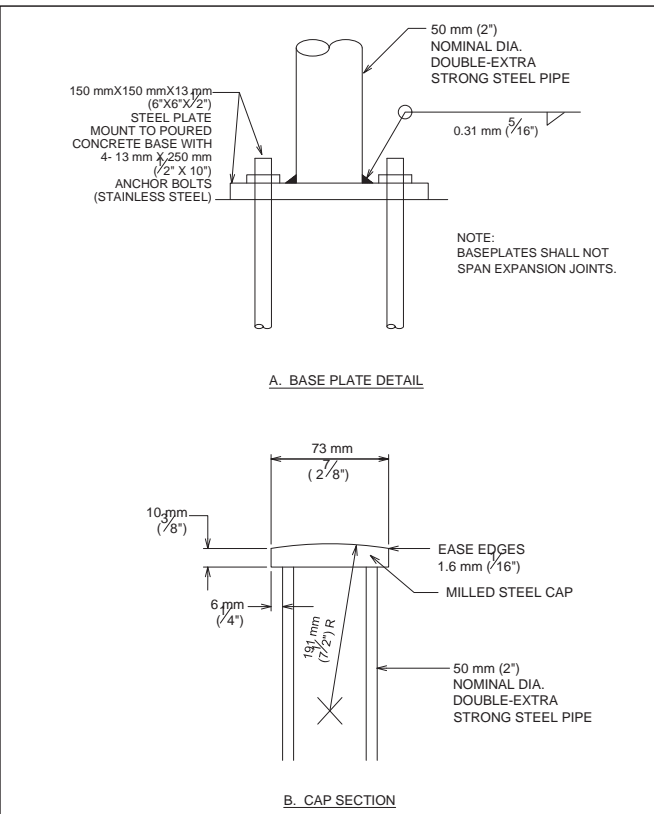




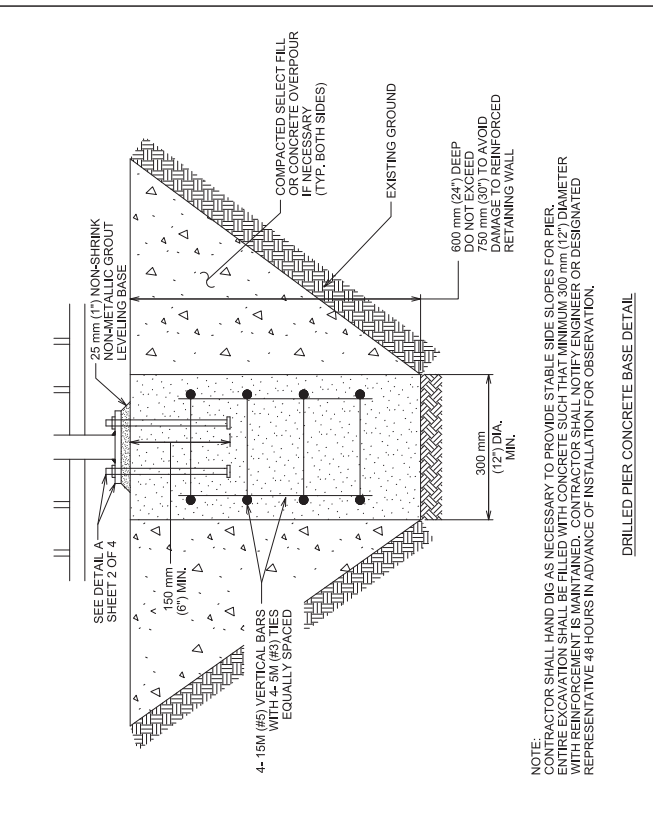




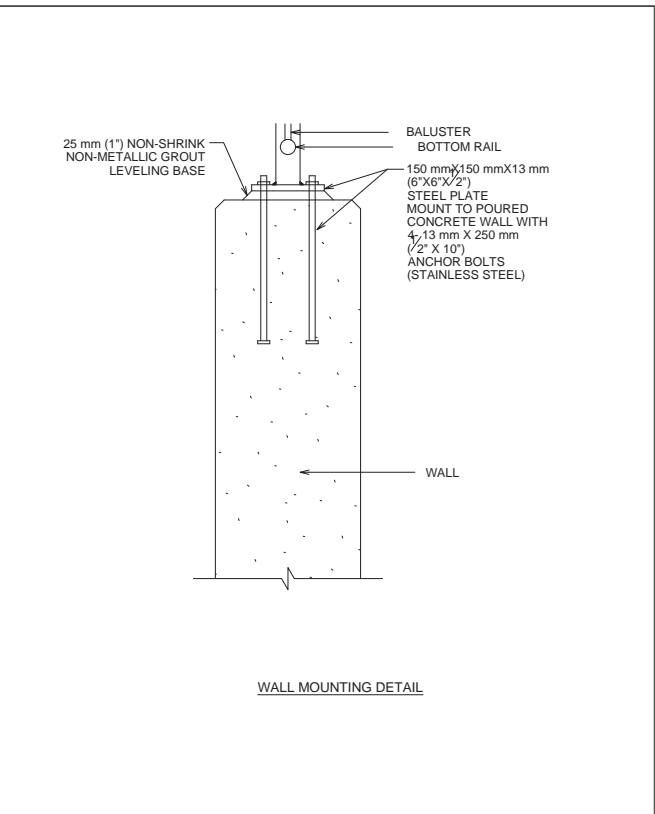
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. <b>707S-1</b> 1 OF 4



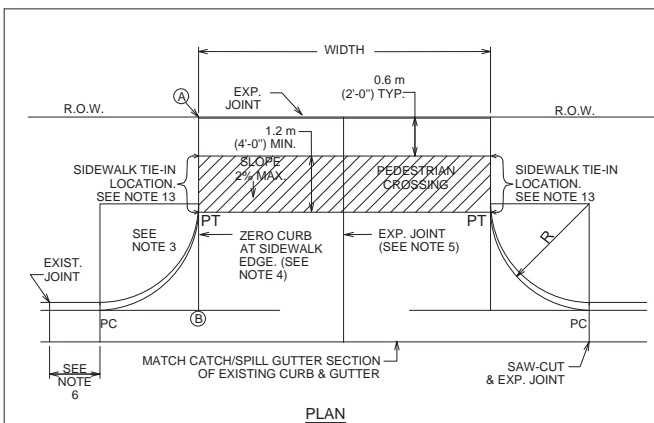
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		PEDESTRIAN HANDRAIL	
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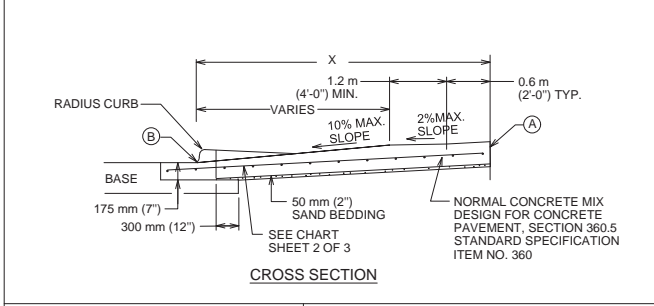
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RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. <b>707S-1</b> 3 OF 4



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. <b>707S-1</b> 4 OF 4

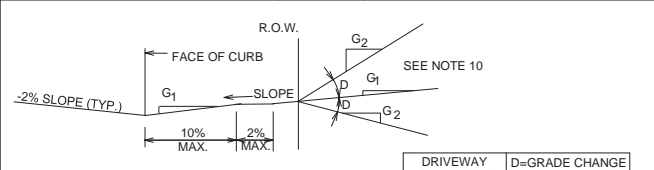


**NOTE:** ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT (A) ABOVE POINT (B) IS, TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (2") RISE/FOOT OVER DISTANCE "X" IN METERS (FEET).



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN	02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. <b>433S-2</b> 1 OF 2

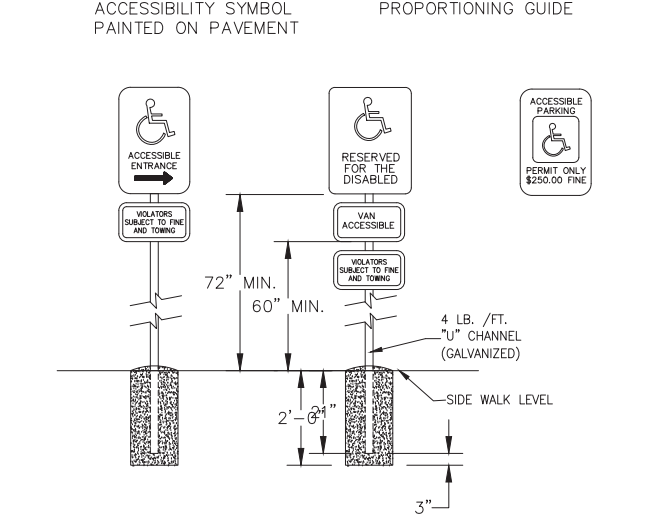
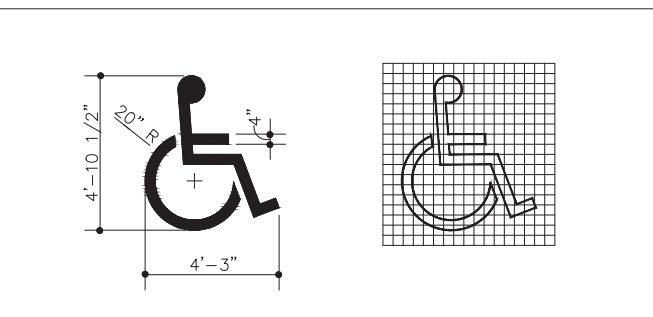
USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDLE DEPTH OF SLAB. AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDLE DEPTH OF SLAB. AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS



DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE
> 1500	0% - 3% MAX
500-1500	3% - 6%
< 500	6% - 15%

- NOTES:**
- ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
  - DRIVEWAY WIDTHS AND RADIUS DIMENSIONS, ONE-TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY-OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 "DRIVEWAYS".
  - THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITIONED INTO THE SIDEWALK TIE-IN LOCATION BEGINNING AT THE RADIUS PC LINE.
  - "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
  - PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
  - IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
  - IF THE BASE IS OVER-EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
  - TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET), WHICHEVER IS LESS.
  - DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
  - WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2" IS GREATER THAN 15%.
  - USE 12 MM (1/2") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE AND AT MIDWIDTH, SEE NOTE 5.
  - SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
  - THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
  - WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

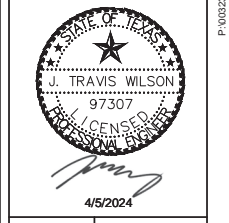
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN	02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. <b>433S-2</b> 2 OF 2



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN	02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. <b>433S-2</b> 2 OF 2

ACCESSIBLE PARKING SIGNAGE	N.T.S.
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**STANDARD DETAILS**  
**8 OF 10**

REVISIONS/CORRECTIONS	
NO.	DESCRIPTION

PROJECT NUMBER 00323-001	DATE 4/5/2024	DESIGNED BY KKE	CHECKED BY JTW
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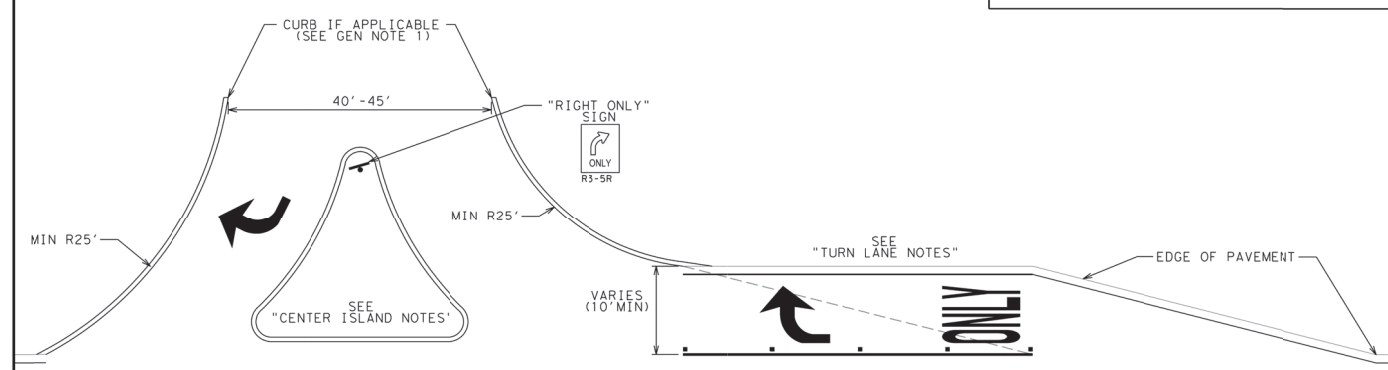
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23-789-SNPS	

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### STANDARD RIGHT IN/RIGHT OUT DRIVEWAY DETAIL



### NOTES

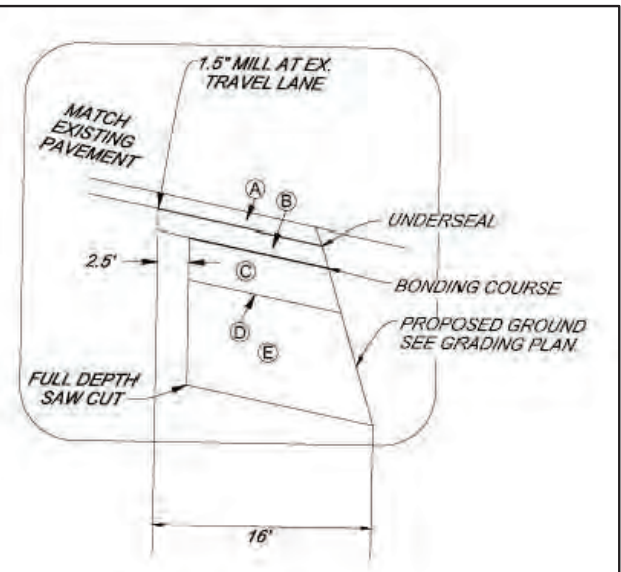
- CENTER ISLAND NOTES**
- SIGN (R3-SR) MAINTAINED BY DRIVEWAY OWNER
  - "RIGHT ONLY" SIGN TO USE " " BASE
  - SEE GENERAL NOTE 1
  - CURB ON CENTER ISLAND SHALL BE PAINTED YELLOW USING TY 1 (100 MIL), PER TXDOT ITEM 666.
  - CENTER OF ISLAND SHALL BE 4" CONCRETE RIPRAP
- TURN LANE NOTES**
- IF TAPERED DRIVEWAY OPTION IS APPLICABLE OR ALLOWED BY AREA ENGINEER:
    - LESS THAN 45 MPH + ANGLED 100' TAPER
    - GREATER THAN 45 MPH + 100' STORAGE AND 100' TAPER
  - ALL STRIPING SHALL BE TY 1 (100 MIL) PER TXDOT ITEM 666
  - REFERENCE PM-22 STANDARD FOR ALL STRIPING AND SIGN DETAILS.
- GENERAL NOTES**
- ALL CURB WITHIN TXDOT R.O.W. AND ADJACENT TO A FACILITY THAT IS GREATER THAN 50 MPH, MUST BE TY 1 MOUNTABLE CURB. SEE STANDARD DETAIL, CCG-22
  - DRIVEWAY MATERIAL SHALL BE ALL WEATHER SURFACE (CONCRETE OR HOTMIK)

Austin District  
South Travis Area Office

Texas Department of Transportation

**RIGHT IN / RIGHT OUT DRIVEWAY DETAIL**

DATE	BY	DESCRIPTION



- LEGEND:**
- (A) 1.5" PFC (ASPHALT) (PG 76-22)
  - (B) 2" TY D PG64-22 HMAC
  - (C) 5" TY B PG64-22 HMAC
  - (D) PRIME COAT
  - (E) 10" TY D GR 5 FLEXBASE

DATE: 4/5/2024  
FILE: 634S-1

TCP	TITLE	MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
1-1	CONVENTIONAL ROAD SHOULDER WORK		✓	✓		
1-2	ONE-LANE TWO-WAY TRAFFIC CONTROL		✓	✓		
1-3	TRAFFIC SHIFTS ON TWO-LANE ROADS		✓	✓		
1-4	LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS		✓	✓		
1-5	LANE CLOSURES FOR DIVIDED HIGHWAYS			✓		
1-6	AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADS)		✓	✓		
2-1	CONVENTIONAL ROAD SHOULDER WORK		✓	✓	✓	✓
2-2	ONE-LANE TWO-WAY TRAFFIC CONTROL		✓	✓	✓	
2-3	TRAFFIC SHIFTS ON TWO-LANE ROADS			✓	✓	✓ (2-3b ONLY)
2-4	LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS			✓	✓	
2-5	LONG TERM LANE CLOSURES MULTILANE CONVENTIONAL ROADS				✓	✓
2-6	LANE CLOSURES ON DIVIDED HIGHWAYS				✓	✓
2-7	DIVERSIONS AND NARROW BRIDGES				✓	✓
2-8	LONG TERM ONE-LANE TWO-WAY CONTROL				✓	✓
3-1	MOBILE OPERATIONS UNDIVIDED HIGHWAYS	✓				
3-2	MOBILE OPERATIONS DIVIDED HIGHWAYS	✓				
3-3	MOBILE OPERATIONS RAISED PAVEMENT MARKER INSTALLATION/REMOVAL	✓				
3-4	MOBILE OPERATIONS FOR ISOLATED WORK AREAS UNDIVIDED HIGHWAYS	✓				
3-5	MOBILE OPERATIONS HERBICIDE TRUCK OPERATIONS	✓				
5-1	SHOULDER WORK FOR FREEWAYS / EXPRESSWAYS		✓ (5-1a only)	✓ (5-1b only)	✓ (5-1c only)	
6-1	FREEWAY LANE CLOSURES		✓	✓	✓	
6-2	WORK AREA NEAR RAMP		✓	✓	✓	
6-3	WORK AREA BEYOND RAMP		✓	✓	✓	
6-4	WORK AREA AT EXIT RAMP		✓	✓	✓	
6-5	WORK AREA BEYOND EXIT RAMP		✓	✓	✓	
6-6	FREEWAY CLOSURE		✓	✓	✓	
6-7	SHORT DURATION FREEWAY CLOSURE SEQUENCE		✓	✓	✓	
6-8	WORK IN EXIT GORE FOR ADT GREATER THAN 10,000		✓	✓	✓	
6-9	WORK IN EXIT GORE FOR ADT LESS THAN 10,000		✓	✓	✓	
7-1	TRAFFIC CONTROL DETAILS FOR SURFACING OPERATIONS				✓	✓

**MOBILE**  
Work that moves continuously or intermittently (stopping for up to approximately 15 minutes).

**SHORT DURATION**  
Work that occupies a location up to 1 hour.

**SHORT TERM STATIONARY**  
Daytime work that occupies a location for more than 1 hour in a single daylight period.

**INTERMEDIATE TERM STATIONARY**  
Work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour.

**LONG TERM STATIONARY**  
Work that occupies a location more than 3 days.

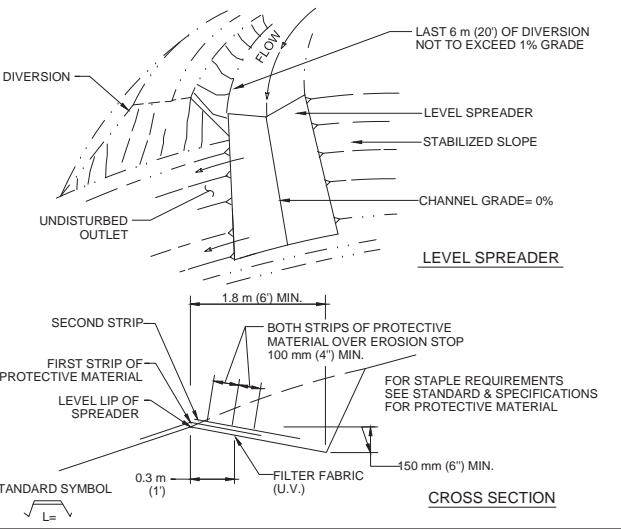
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Texas Department of Transportation

Traffic Operations Division Standard

**TRAFFIC CONTROL PLAN SELECTION WORKSHEET**

REV	DATE	BY	DESCRIPTION
1	4/5/2024	JPM	ISSUED FOR CONSTRUCTION



- GENERAL NOTES:**
- LEVEL SPREADERS SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF THE ENGINEER.
  - CONSTRUCT LEVEL LIP ON ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF SEDIMENT-FREE RUNOFF (CONVERTING CHANNEL FLOW TO SHEET FLOW).
  - LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL (NOT ON FILL).
  - A MATTING EROSION STOP SHALL BE PLACED VERTICALLY AND AT LEAST 150 mm (6") DEEP IN A SILT TRENCH 0.3 m (1') BACK OF AND PARALLEL WITH THE LIP. THIS EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP AND SHALL BE TRIMMED AFTER BACKFILLING WITH TAMPED SOIL, SO THAT THE UPPER EDGE IS FLUSH WITH THE SOIL SURFACE.
  - THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING 2 STRIPS OF JUTE, EXCELSIOR OR OTHER APPROVED PROTECTIVE MATERIAL AS SHOWN ABOVE.
  - THE ENTRANCE CHANNEL SHALL NOT EXCEED A 1% GRADE FOR AT LEAST 6 m (20') BEFORE ENTERING SPREADER.
  - STORM RUNOFF CONVERTED TO SHEET FLOW SHALL OUTLET ONTO STABILIZED AREAS. WATER SHALL NOT BE RECONCENTRATED IMMEDIATELY BELOW THE POINT OF DISCHARGE.
  - PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.

CITY OF AUSTIN  
WATERSHED PROTECTION DEPARTMENT

LEVEL SPREADER

RECORD COPY SIGNED BY J. PATRICK MURPHY 3/27/00 ADOPTED

STANDARD NO. 634S-1

DATE: 4/5/2024  
FILE: 634S-1

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**STANDARD DETAILS**  
9 OF 10

NO.	DATE	DESCRIPTION	BY



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PROJECT NUMBER: 00323-001  
DATE: 4/5/2024  
DESIGNED: KKE  
CHECKED: JTW

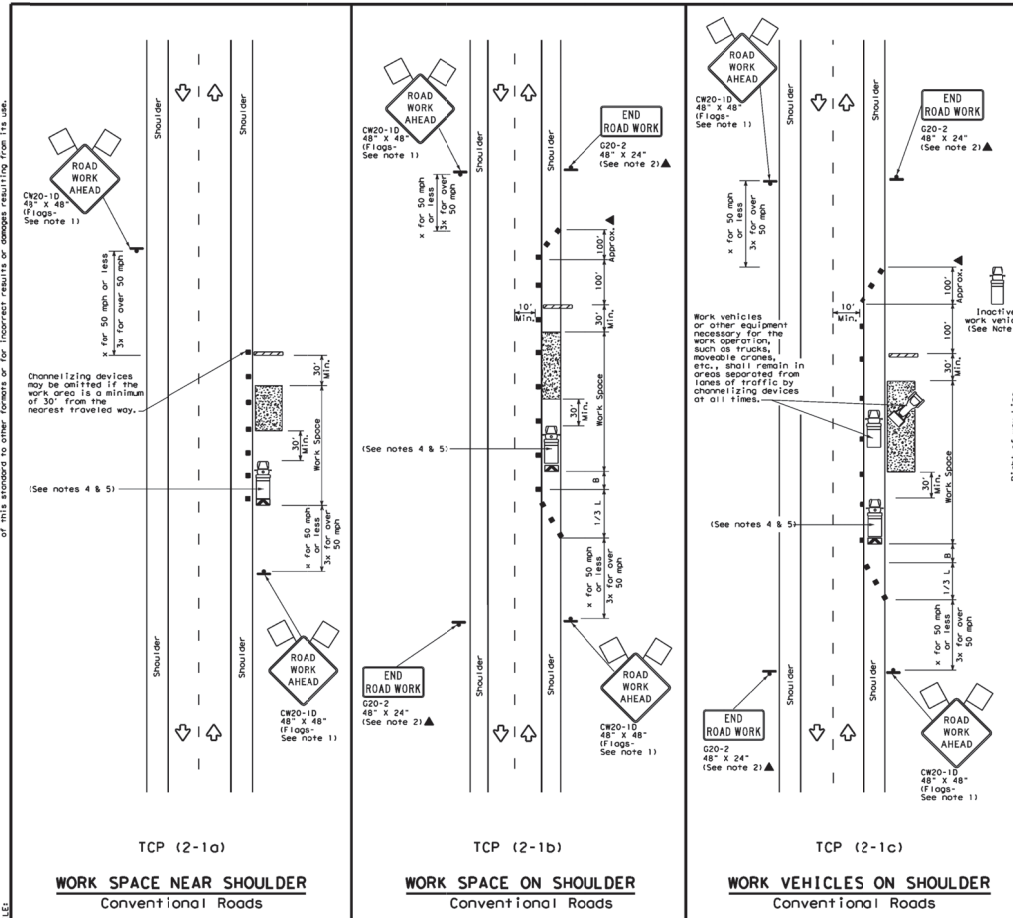
SHEET NO. 28 OF 41  
23-789-SNPS

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DATE: \_\_\_\_\_



LEGEND	
Type 3 Barricade	Channelizing Devices
Heavy Work Vehicle	Truck Mounted Attenuator (TMA)
Trailer Mounted Flashing Arrow Board	Portable Changeable Message Sign (PCMS)
Sign	Traffic Flow
Flag	Flagger

Posted Speed	Formula	Minimum Distance	Suggested Minimum Spacing of Channelizing Devices	Minimum Sign Spacing	Suggested Longitudinal Buffer Spacing
30	$10' + \frac{L}{10}$	150'	30'	120'	90'
35	$10' + \frac{L}{10}$	205'	35'	160'	120'
40	$10' + \frac{L}{10}$	265'	40'	240'	155'
45	$10' + \frac{L}{10}$	450'	45'	320'	195'
50	$10' + \frac{L}{10}$	500'	50'	400'	240'
55	$10' + \frac{L}{10}$	550'	55'	500'	295'
60	$10' + \frac{L}{10}$	600'	60'	600'	350'
65	$10' + \frac{L}{10}$	650'	65'	700'	410'
70	$10' + \frac{L}{10}$	700'	70'	800'	475'
75	$10' + \frac{L}{10}$	750'	75'	900'	540'

TYPICAL USAGE			
MOBILE	SHORT DURATION	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓	✓	✓	✓

**GENERAL NOTES**

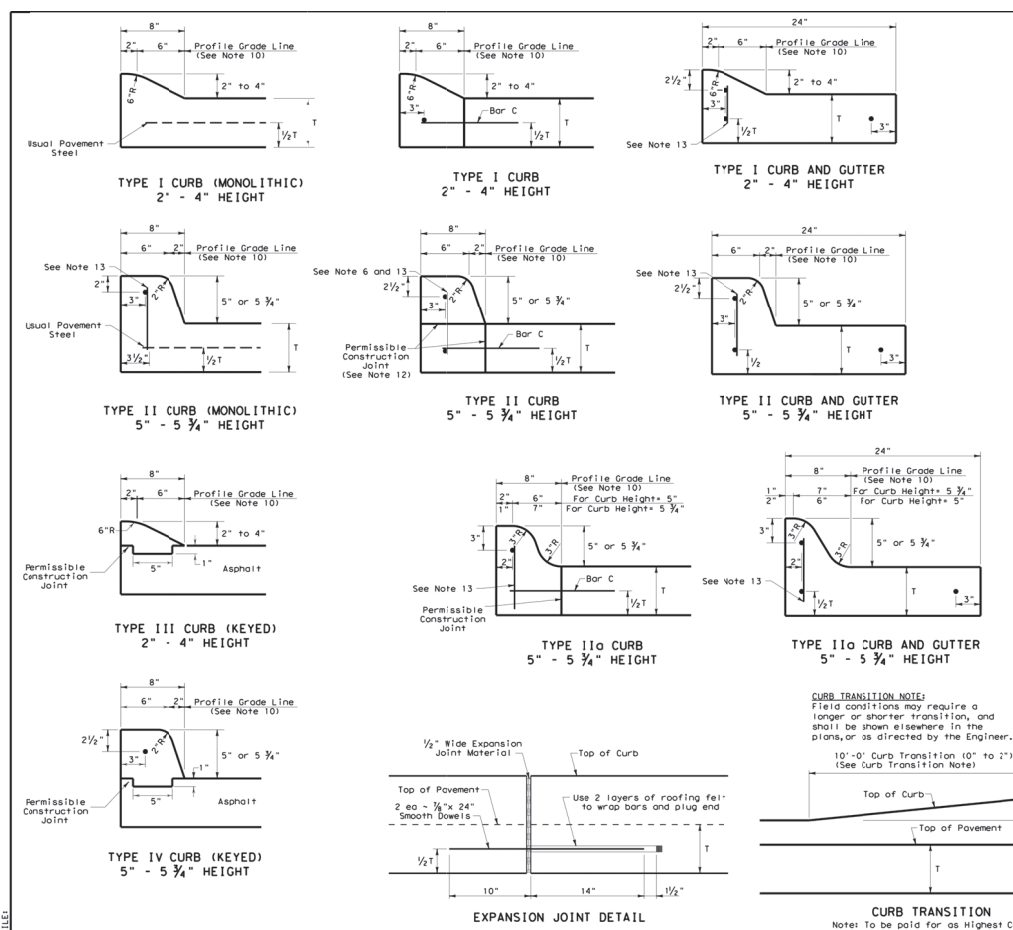
- Flags attached to signs where shown, are REQUIRED.
- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol which are optional when stored in the plans, or for routine maintenance work, when approved by the Engineer.
- Shoulder work on divided highways, expressways and freeways.
- Shoulder vehicles with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
- Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
- See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
- Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
- C20-10 "SHOULDER WORK" signs may be used in place of C20-10 "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation Traffic Operations Division Standard

**TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK**

**TCP (2-1)-18**

FILE	00323-001.dgn	DATE	04/18/2024	BY	KKE
REV	1	DESCRIPTION			
2-34	4-98				
8-9	3-15				
1-97	2-18				



**GENERAL NOTES**

- All materials and construction shall be in accordance with Item 529, "Concrete Curb, Gutter, and Combined Curb and Gutter."
- Concrete shall be Class A.
- When reinforcing bars are used, they shall be No. 4 unless otherwise shown. The use of fiber reinforced concrete in lieu of reinforcing steel is acceptable, use fibers meeting the requirements of DMS 4550, "Fibers for Concrete," and other fibers in accordance with Material Producers List (MPL) "Fibers for Class A and B Concrete Applications."
- Round exposed sharp edges with a rounding tool, to a minimum radius of 1/4 inch.
- All existing curbs and driveways to be removed shall be sawed or removed at existing joints.
- Where concrete curb is to be placed on existing concrete pavement, Bar B may be drilled and grouted in place, or may be inserted into fresh concrete.
- Expansion and contraction joints shall be constructed to match pavement joints in all curbs and curb and gutter sections to jointed concrete pavements. Where placement of curb or curb and gutter is not adjacent to concrete pavement, expansion joints shall be provided at structures, curb returns at streets, and at locations directed by the Engineer.
- Vertical and horizontal dowel bars and transverse reinforcing bars shall be placed at four feet C-C.
- Dimension 'T' shown is the thickness of concrete pavement. When curb is installed adjacent to flexible pavement dimension 'T' is 8" maximum.
- Usual profile grade line. Refer to typical sections and plan profile sheets for exact locations.
- One-half inch expansion joint material shall be provided where curb or curb and gutter is adjacent to sidewalk or riprap.
- When horizontal permissible construction joints are used, the longitudinal pavement steel shall be placed in accordance with pavement details shown elsewhere in the plans. Reinforcing steel for curb section shall then conform to that required for concrete curb.
- Bar B placement as needed (typically at four ft. C-C) to support curb reinforcing steel during concrete placement.

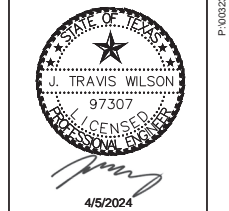
  

**CONCRETE CURB AND GUTTER**

**CCCG-22**

FILE	00323-001.dgn	DATE	04/18/2024	BY	KKE
REV	1	DESCRIPTION			
2-34	4-98				
8-9	3-15				
1-97	2-18				

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**STARBUCKS BEE CAVE**  
 14211 STATE HWY 71, BEE CAVE, TEXAS 78738

**STANDARD DETAILS**  
 10 OF 10

**811**  
 Know what's below. Call before you dig.  
 FOR CITY USE ONLY:

**CAUTION!**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

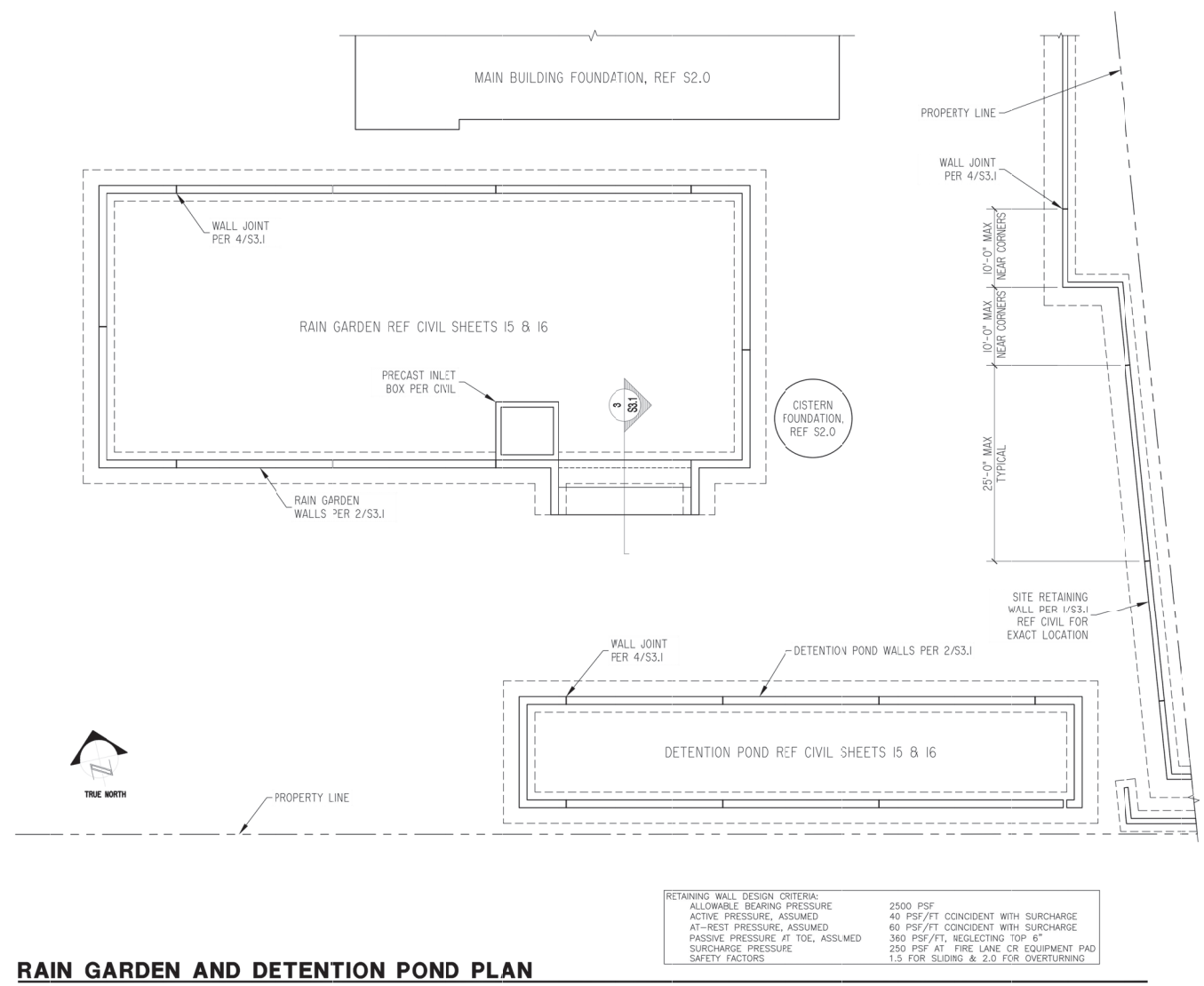
PROJECT NUMBER	00323-001
DATE	4/5/2024
DESIGNED	KKE
CHECKED	JTW

REVISIONS / CORRECTIONS	
NO.	DESCRIPTION

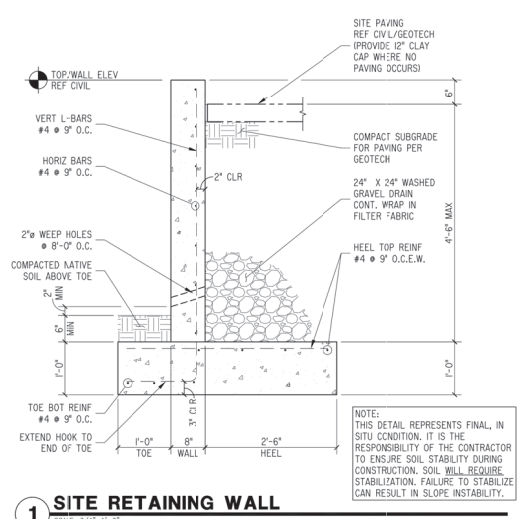
**SHEET NO.**  
 29 of 41

**23-789-SNPS**

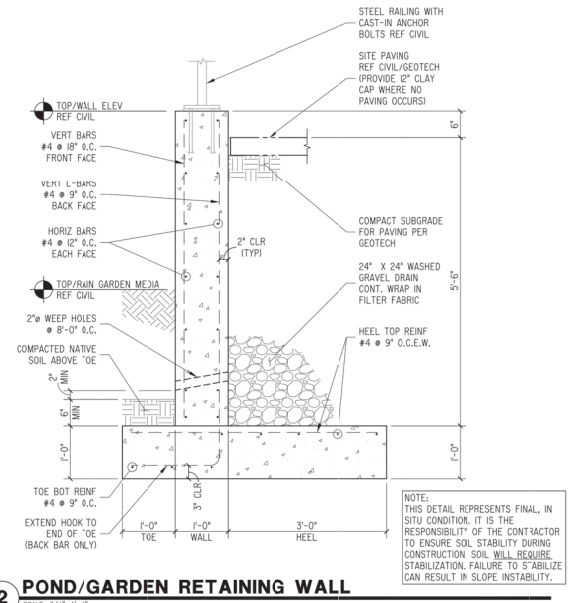


**RAIN GARDEN AND DETENTION POND PLAN**  
 1/8"=1'-0"

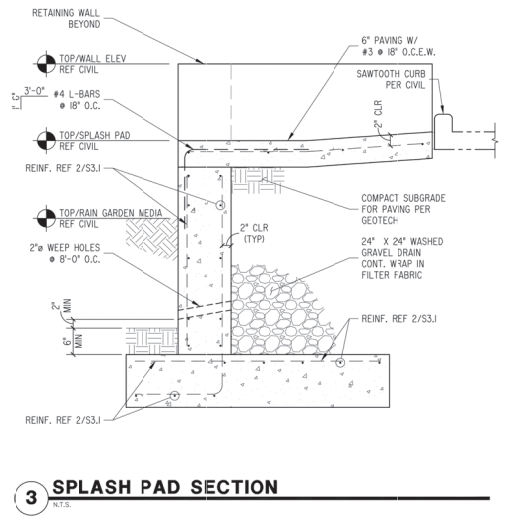
RETAINING WALL DESIGN CRITERIA:	
ALLOWABLE BEARING PRESSURE	2500 PSF
ACTIVE PRESSURE, ASSUMED	40 PSF/FT COINCIDENT WITH SURCHARGE
AT-REST PRESSURE, ASSUMED	60 PSF/FT COINCIDENT WITH SURCHARGE
PASSIVE PRESSURE AT TOE, ASSUMED	360 PSF/FT, NEGLECTING TOP 6"
SURCHARGE PRESSURE	250 PSF AT FIRE LANE OR EQUIPMENT PAD
SAFETY FACTORS	1.5 FOR SLIDING & 2.0 FOR OVERTURNING



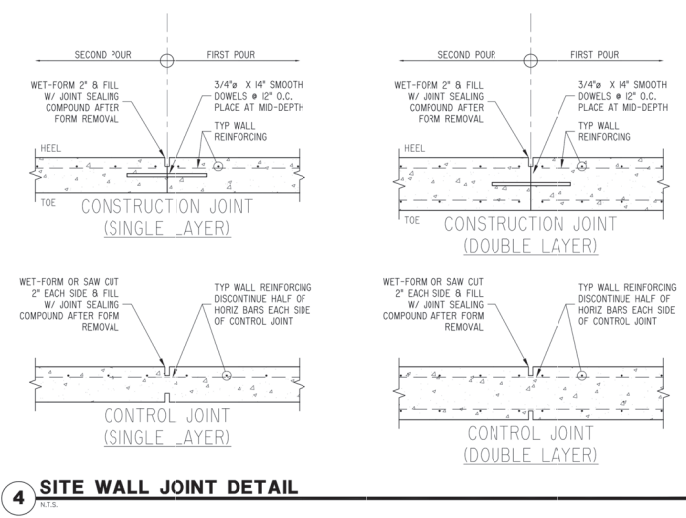
**1 SITE RETAINING WALL**  
 SCALE: 3/4"=1'-0"



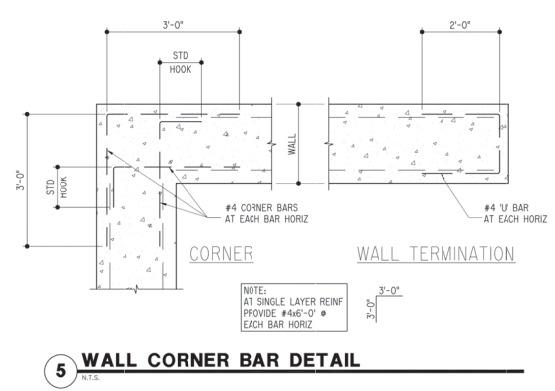
**2 POND/GARDEN RETAINING WALL**  
 SCALE: 3/4"=1'-0"



**3 SPLASH PAD SECTION**  
 SCALE: 3/4"=1'-0"



**4 SITE WALL JOINT DETAIL**  
 SCALE: 3/4"=1'-0"



**5 WALL CORNER BAR DETAIL**  
 SCALE: 3/4"=1'-0"



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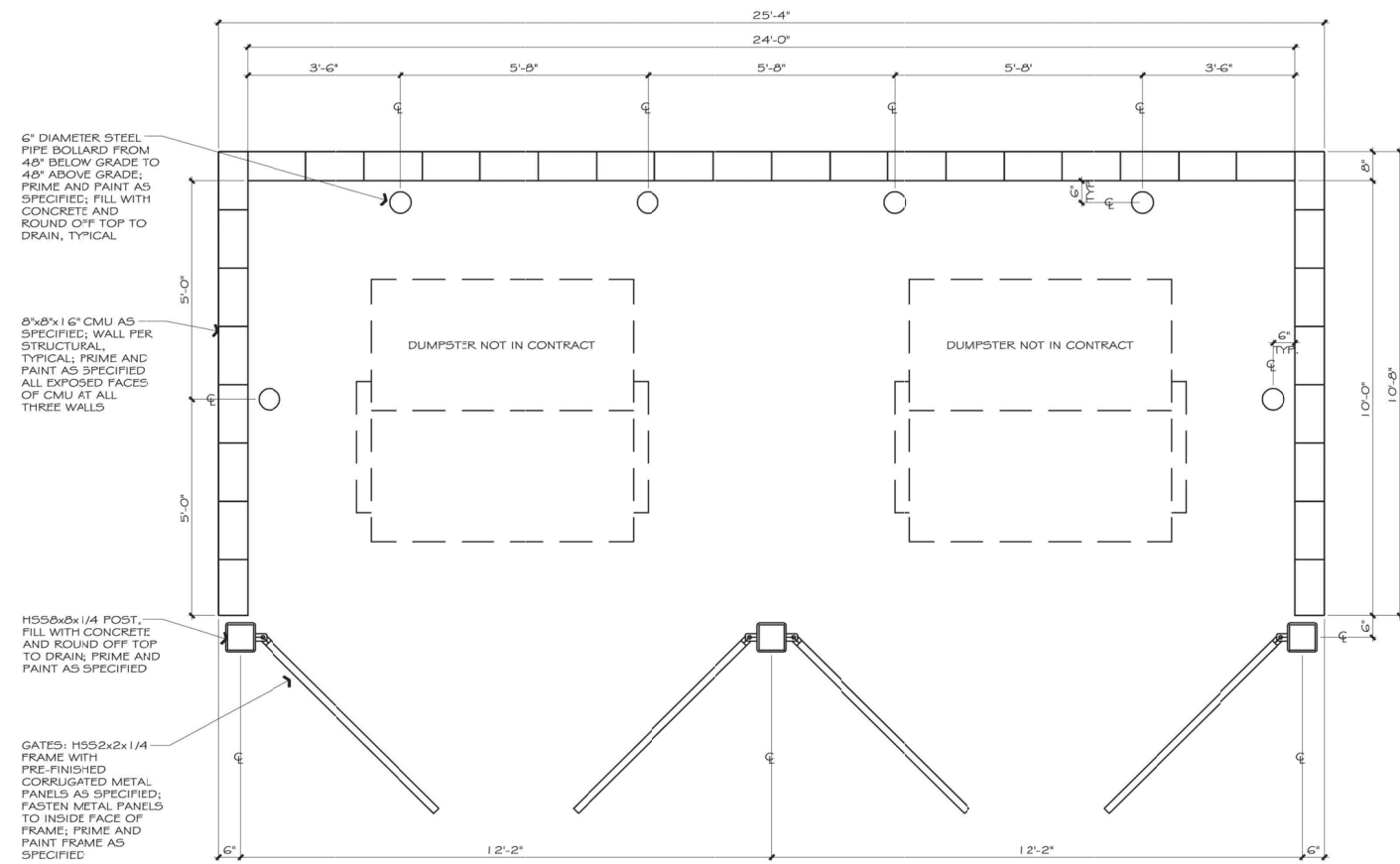
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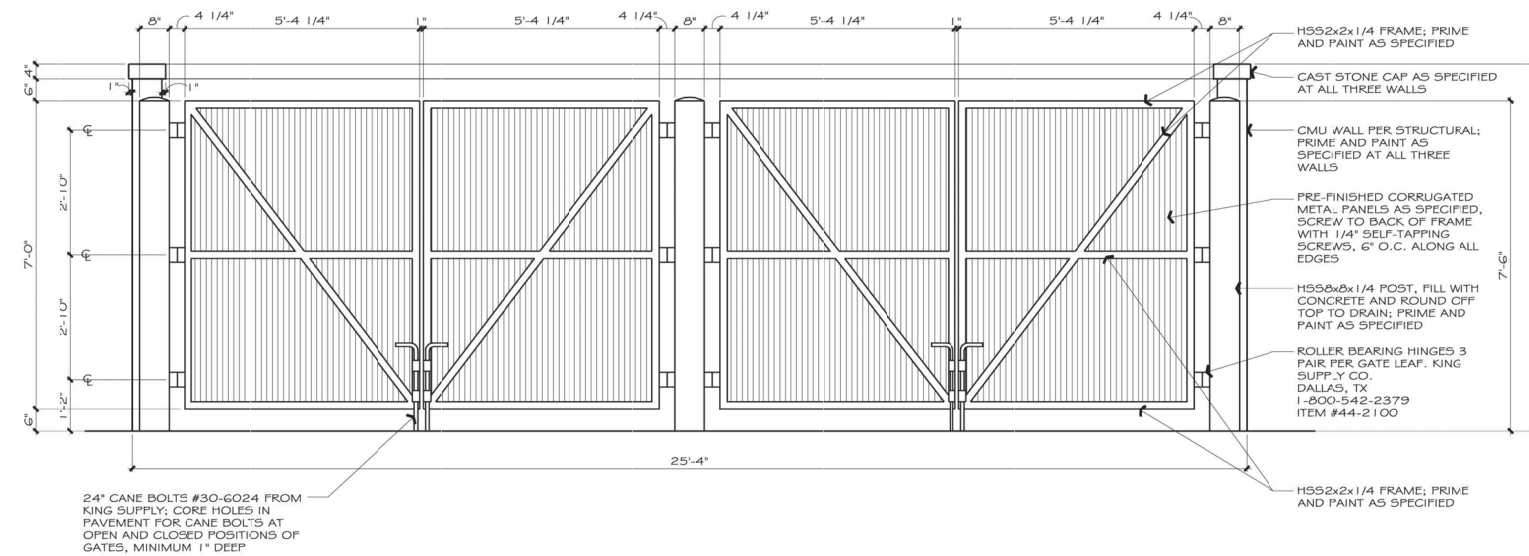
31 OF 41

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**1 DUMPSTER ENCLOSURE PLAN**

SCALE: 1/2" = 1'-0"



**2 DUMPSTER ENCLOSURE ELEVATION**

SCALE: 1/2" = 1'-0"



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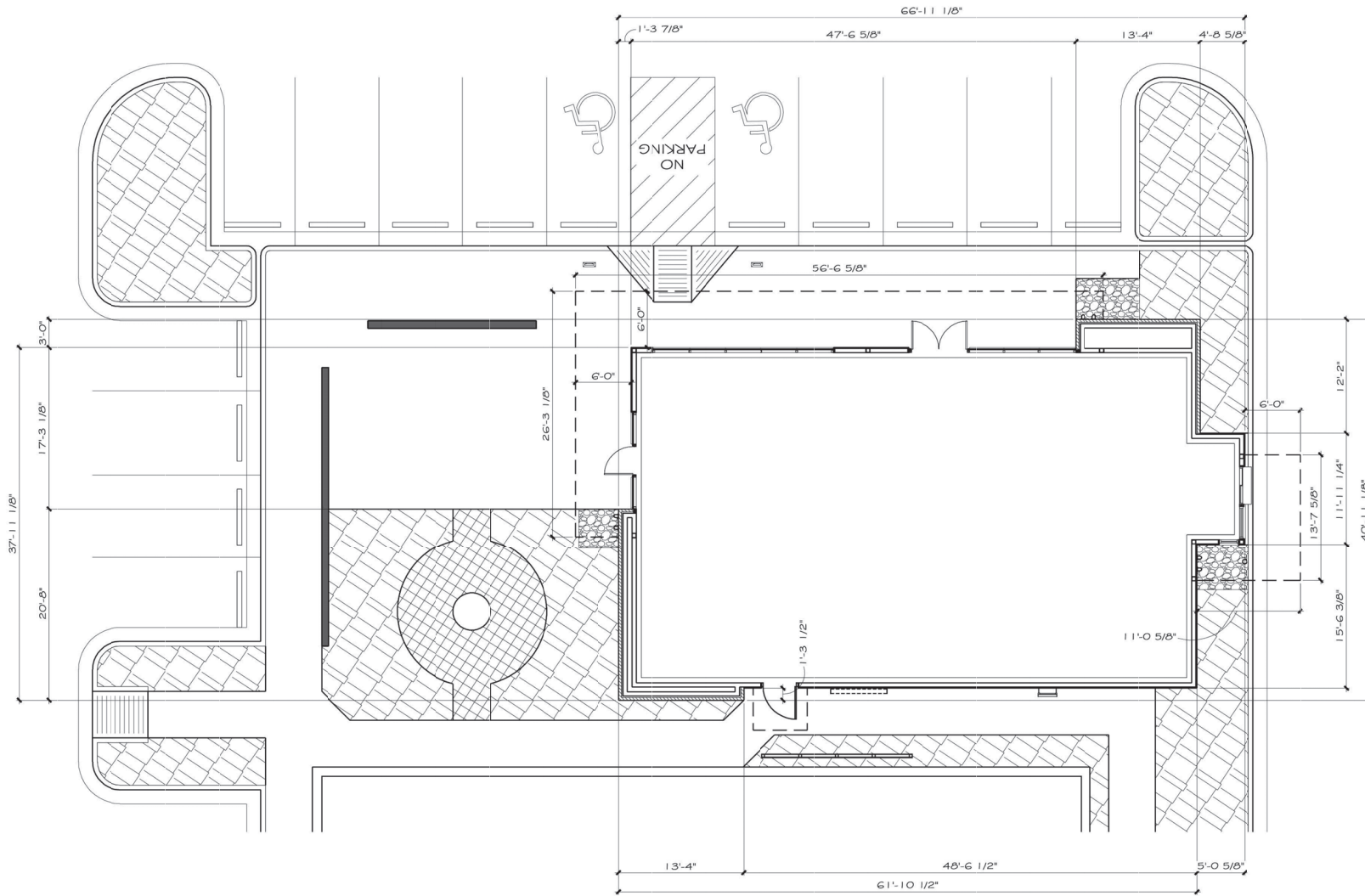
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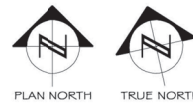
A2

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# 1 FLOOR PLAN

SCALE: 1/8" = 1'-0"



LINEAR GLAZING FRONTAGE FOR NORTH ELEVATION FACIING R.O.W. = 37'-3" (55.7%) LINEAR GLAZING

FACADE MATERIAL CALCULATIONS			
	TOTAL FACADE AREA	MASONRY (BRICK + STUCCO)	GLAZING
NORTH ELEVATION	1,222 S.F.	360 S.F. (29.5%)	327 S.F. (26.8%)
WEST ELEVATION	821 S.F.	538 S.F. (65.5%)	93 S.F. (11.9%)
SOUTH ELEVATION	1,282 S.F.	1,171 S.F. (91.3%)	10 S.F. (0.8%)
EAST ELEVATION	801 S.F.	599 S.F. (74.8%)	38 S.F. (4.7%)
ALL ELEVATIONS	4,126 S.F.	2,668 S.F. (64.7%)	468 S.F. (11.3%)

### ARCHITECTURAL ELEMENTS:

#### HIGH-QUALITY DESIGN ELEMENTS:

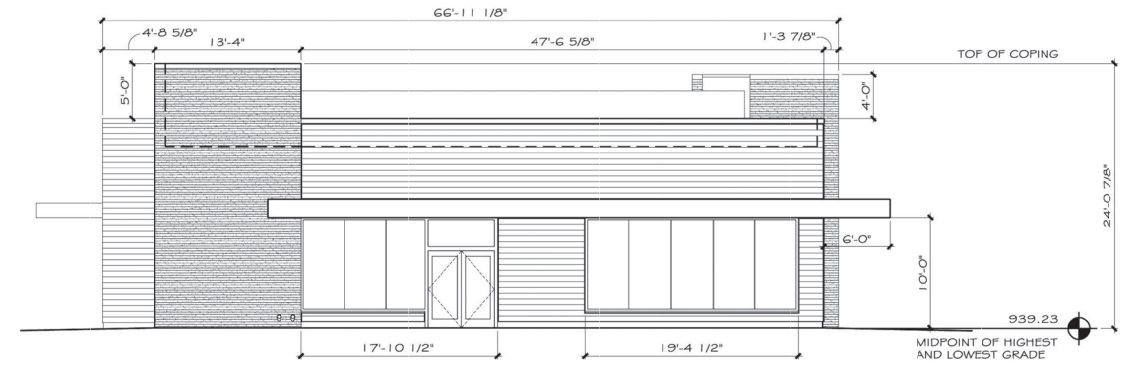
- CANOPIES WITH 6'-0" DEPTH.
- OUTDOOR PATIO AT LEAST 250 S.F. AND EXCLUSIVE OF SIDEWALKS.
- DISPLAY WINDOWS AT LEAST 7'-0" IN HEIGHT AND MEASURING NO MORE THAN 3'-0" FROM THE GROUND.
- INTEGRATED KNEE WALLS WITH LANDSCAPE AND SITTING AREA.

#### SITE DESIGN ELEMENTS:

- AT LEAST 50% OF THE PARKING AREA ON THE SAME LOT TO THE SIDE OR REAR OF ALL BUILDINGS.
- PATIO FOR OUTDOOR DINING EQUIVALENT TO 5% OF THE SITE OR 30% OF PLANNED RESTAURANT DINING AREA. THE OUTDOOR PATIO IS 500 S.F. WHICH IS 67% OF THE 750 S.F. INTERIOR RESTAURANT DINING AREA.
- ADDITIONAL OFF-STREET CONNECTION WITH NEIGHBORING PROPERTY.
- ALL DRIVE-THRU LANES AND WINDOWS LOCATED BEHIND OR TO THE SIDE OF ALL BUILDINGS AND NOT BETWEEN PUBLIC OR PRIVATE RIGHT-OF-WAY AND THE FRONT OF THE BUILDING OR AN OPEN SPACE.

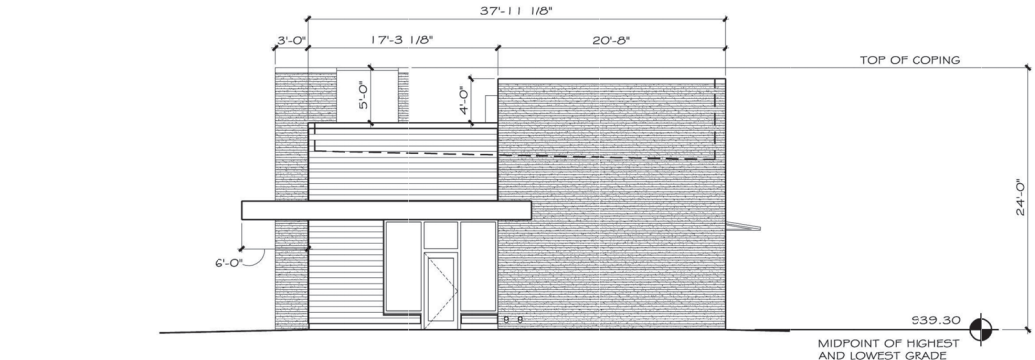
#### SUSTAINABILITY ELEMENTS:

- ALTERED TOPOGRAPHY AND ELEVATION OF THE SITE BY NO MORE THAN 4'-0" ACROSS 80% OF THE SITE.
- INCORPORATION OF A RAINWATER HARVESTING SYSTEM CAPABLE OF CAPTURING A ONE INCH RAINFALL EVENT FOR AT LEAST 25% OF THE ROOF AREA.



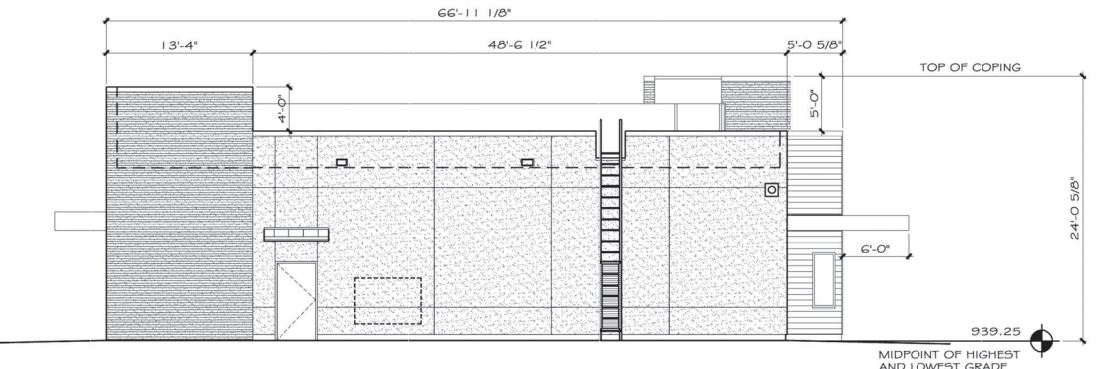
# 2 NORTH ELEVATION

SCALE: 1/8" = 1'-0"



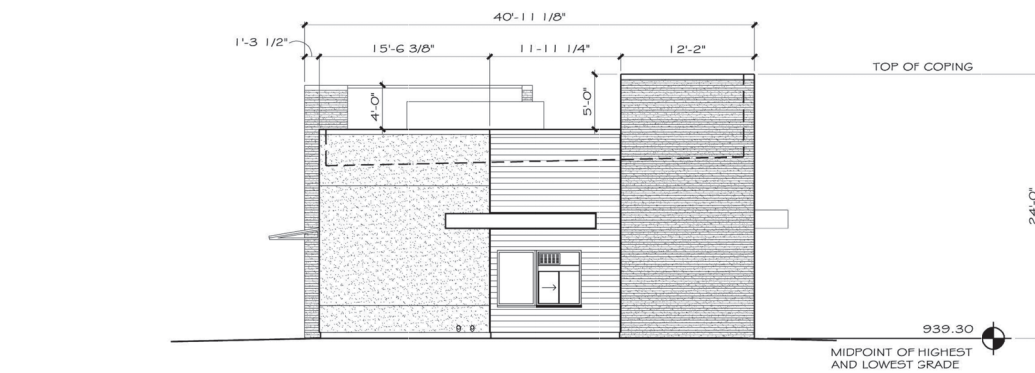
# 3 WEST ELEVATION

SCALE: 1/8" = 1'-0"



# 4 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



# 5 EAST ELEVATION

SCALE: 1/8" = 1'-0"



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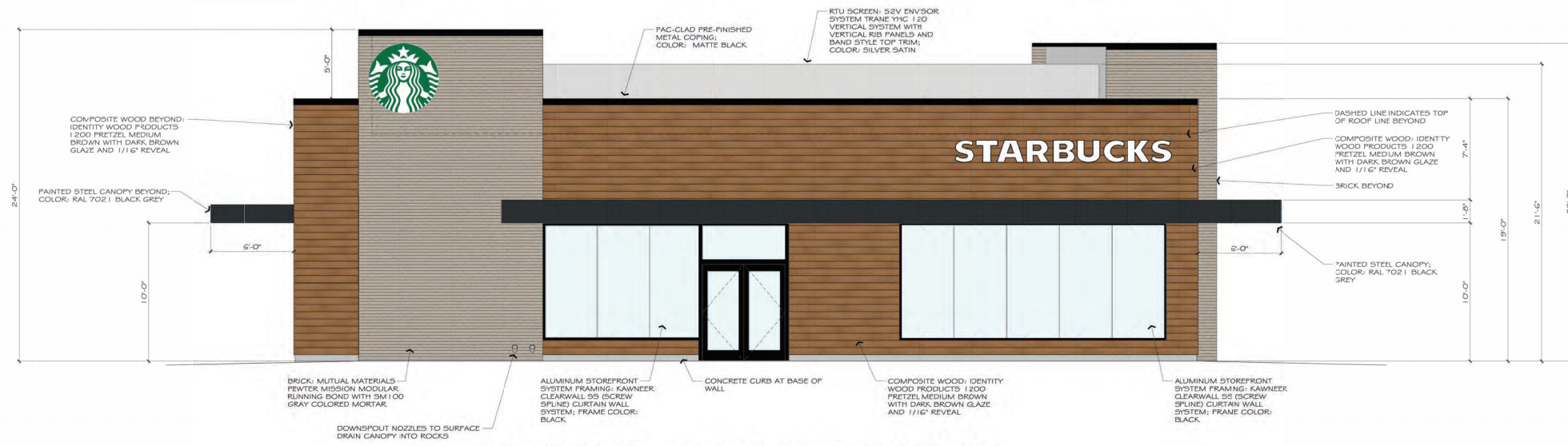
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A2.3

COLORED ELEVATIONS



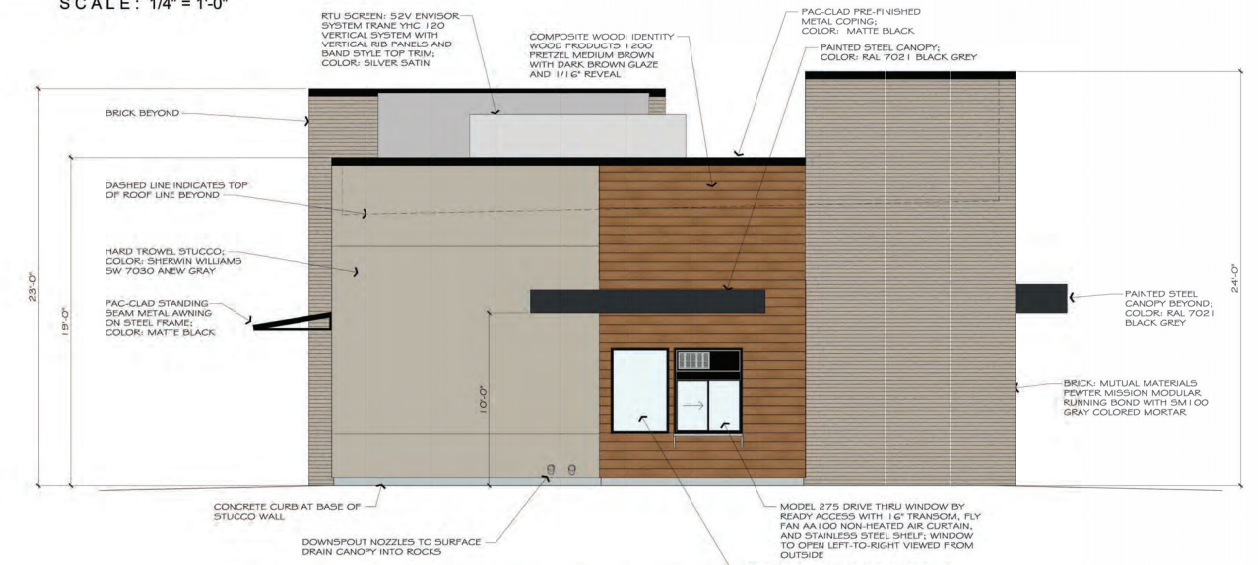
1 NORTH ELEVATION

SCALE: 1/4" = 1'-0"



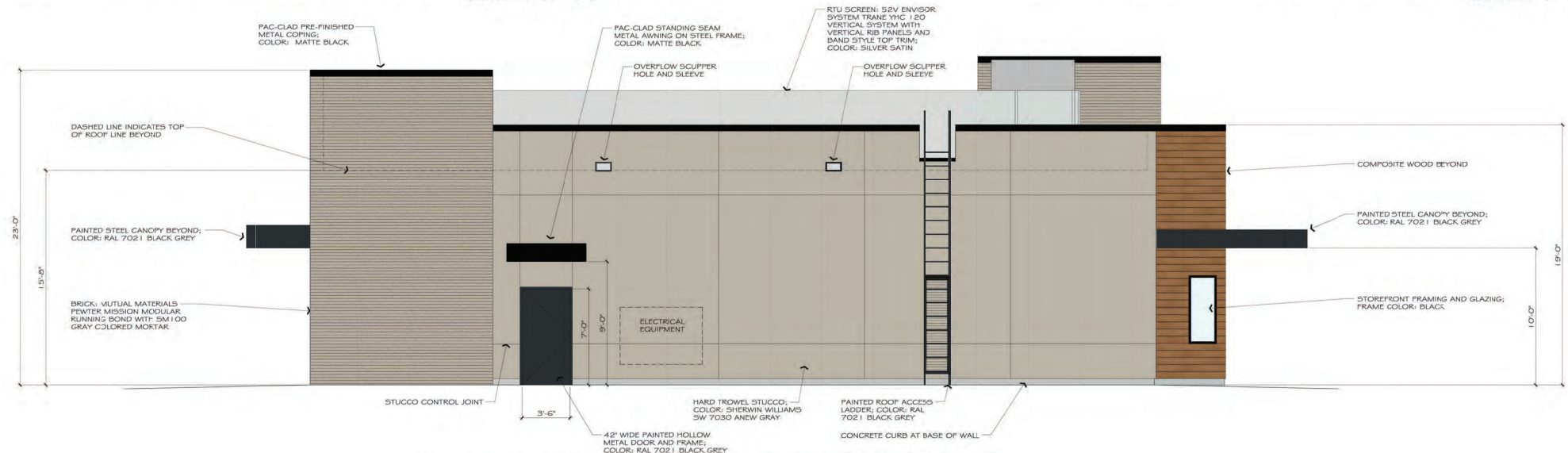
2 WEST ELEVATION

SCALE: 1/4" = 1'-0"



3 EAST ELEVATION

SCALE: 1/4" = 1'-0"



4 SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



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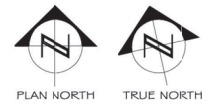
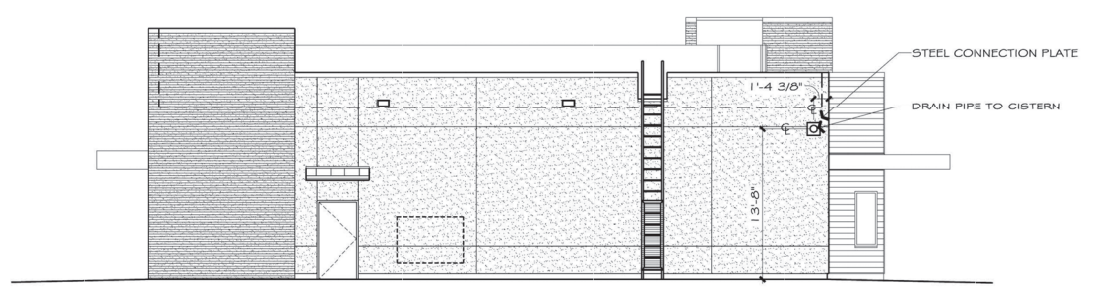
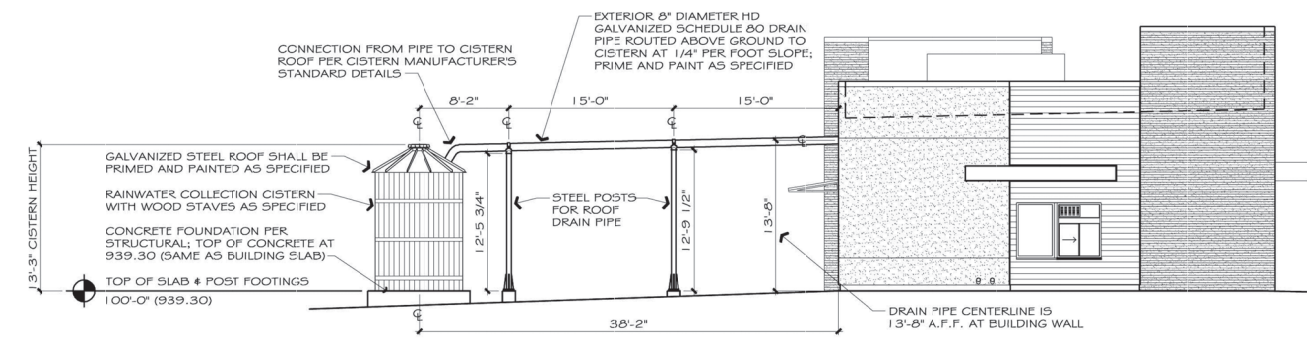
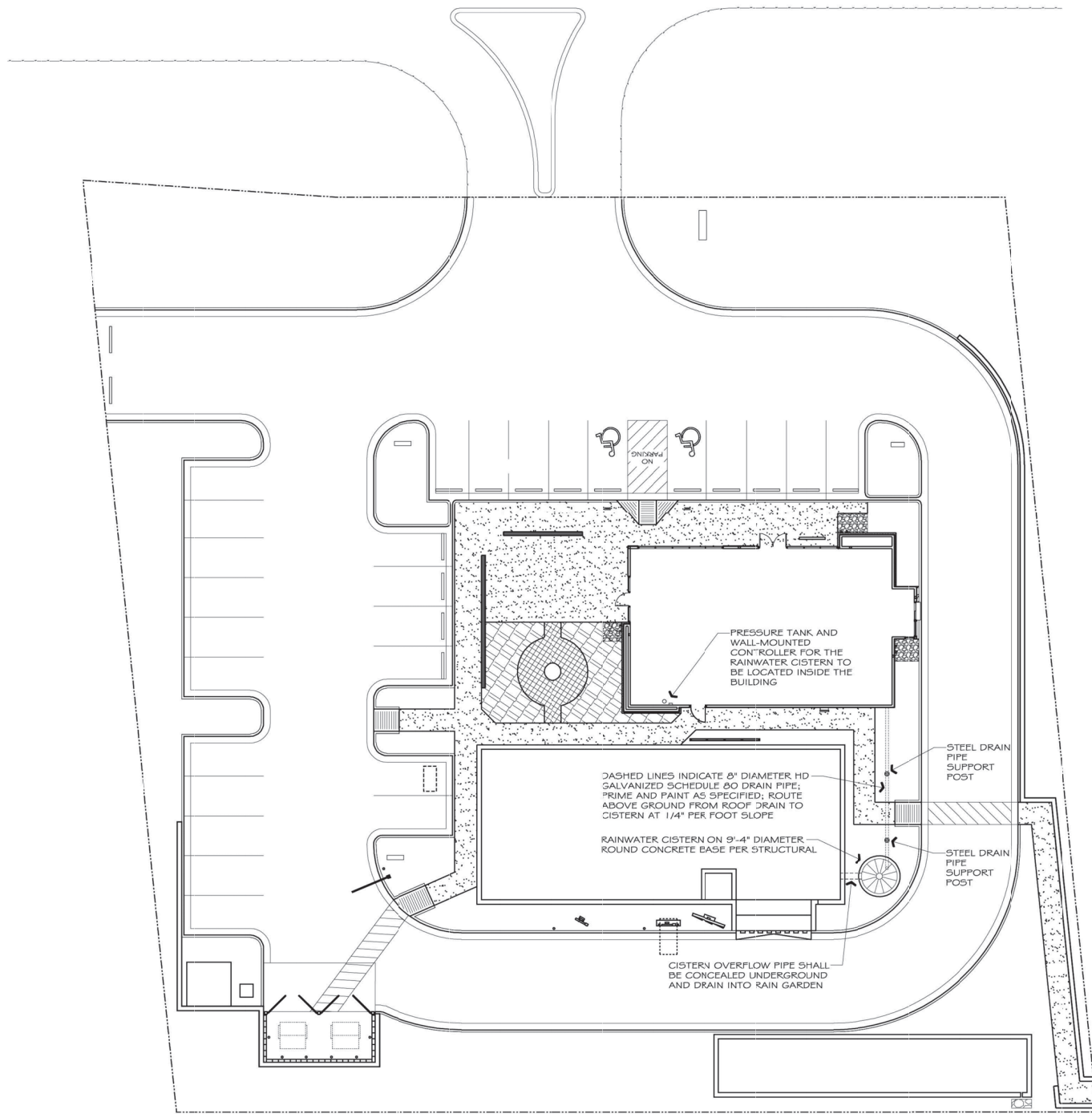
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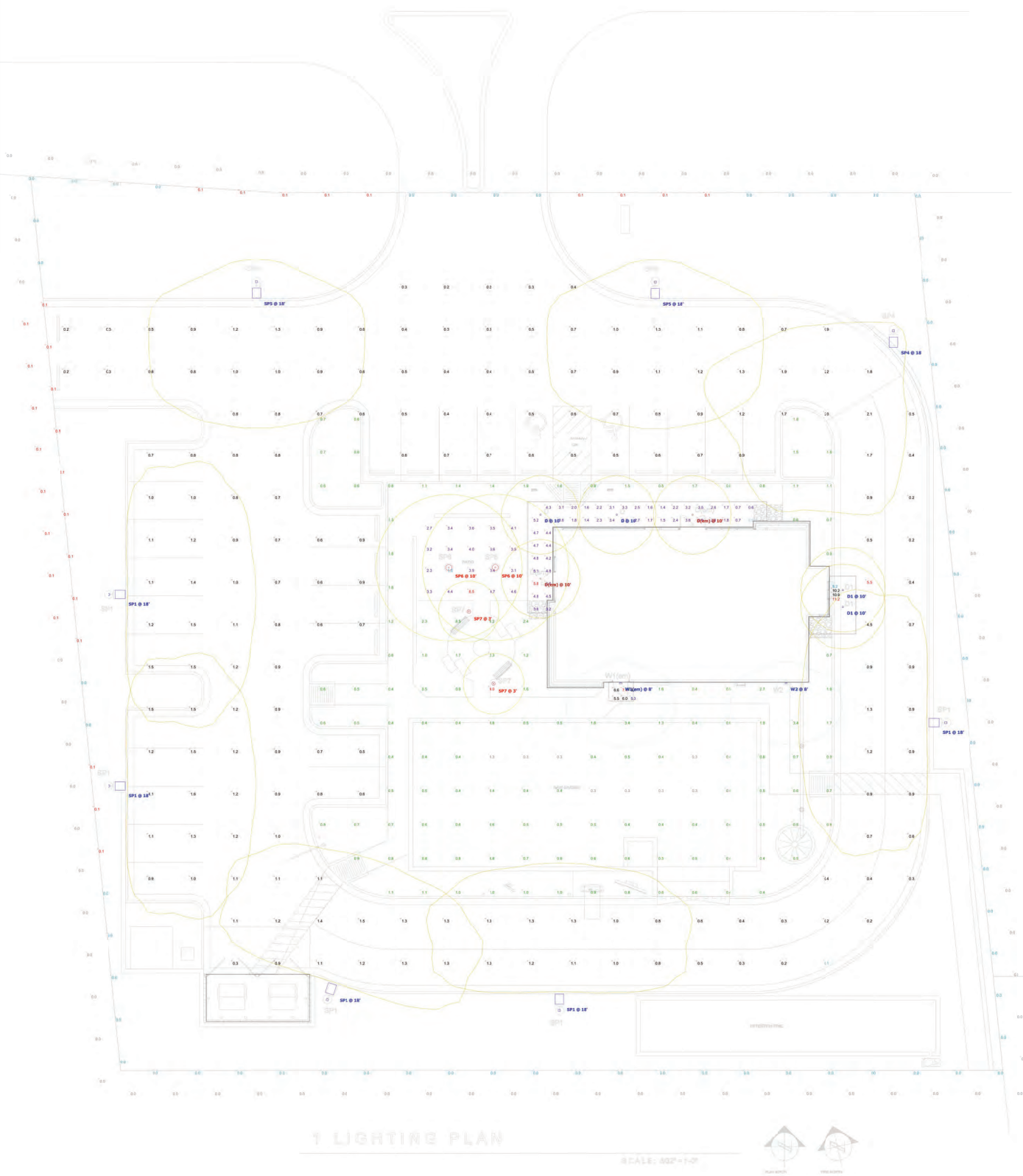


Symbol	Label	QTY	Manufacturer	Catalog	Description	Number	Lamp	LLF	Input
○	D	2	Indy	LP4 08LM 30K HVOLT G4 80CRI ZT CONTROLS HW BD	INDY 4" DIA. 1-LED 08LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) WIDE HYPERBOLIC REFLECTOR	1	520	0.9	7.5
○	D(em)	2	Indy	LP4 08LM 30K HVOLT G4 80CRI ZT BR CONTROLS HW BD	INDY 4" DIA. 1-LED 08LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) WIDE HYPERBOLIC REFLECTOR	1	520	0.9	7.5
○	D1	2	Indy	LP4 08LM 30K HVOLT G4 80CRI ZT HW BD	INDY 4" DIA. 1-LED 08LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) MEDIUM HYPERBOLIC REFLECTOR	1	1001	0.9	13.7
□	SP1	5	Lithonia Lighting	D5X0 LED P1 30K 80CRI BLCA HVOLT RPA PERS DBLXD DLL127F1.SJU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 4 Extreme Backlight Control	1	3135	0.9	33.21
□	SP4	1	Lithonia Lighting	D5X0 LED P1 30K 80CRI LQCD HVOLT RPA PERS DBLXD DLL127F1.SJU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Left Corner Cutoff Extreme Backlight Control	1	3063	0.9	33.21
□	SP5	2	Lithonia Lighting	D5X0 LED P1 30K 80CRI T7M HVOLT RPA PERS HS DBLXD DLL127F1.SJU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Forward Throw House Side Shield	1	3577	0.9	33.21
○	SP6	2	Landscape Forms	A1500-T5 80F 30K UV1 P2 x 10FT A3550-10-01 (BLACK)	Black aluminum housing, frosted plastic lens enclosure	1	2761	0.9	31.8
○	SP7	2	Landscape Forms Inc	A1100-T5 30K UV1 (BLACK)	Black aluminum housing, frosted plastic lens enclosure	1	1011	0.9	10.3
□	W1(em)	1	Lithonia Lighting	WDG1 LED P1 30K 83CRI VF HVOLT SRM EHW DBLXD	WDG1 LED WITH P. - PERFORMANCE PACKAGE, 3000K, 83CRI, VISUAL COMFORT FORWARD OPTIC	1	1161	0.9	10
□	W2	1	Lithonia Lighting	WDG1 LED P1 30K 83CRI VW	WDG1 LED WITH P. - PERFORMANCE PACKAGE, 3000K, 83CRI, VISUAL COMFORT WIDE OPTIC	1	1163	0.9	10

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Bldg. Entrances	+	3.1 fc	5.8 fc	0.5 fc	11.6:1	6.2:1
Bldg. Perimeter Site	+	1.1 fc	9.0 fc	0.3 fc	30.0:1	3.7:1
Drive Thru Cashier Window	+	10.4 fc	11.2 fc	9.2 fc	1.2:1	1.1:1
Parking / Drive	+	0.9 fc	5.5 fc	0.1 fc	55.0:1	9.0:1
Patio Area	+	3.6 fc	6.5 fc	1.5 fc	4.3:1	2.4:1
Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Service Door	+	6.2 fc	7.4 fc	5.3 fc	1.4:1	1.2:1
5' Offset Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A

**SITE LIGHTING NOTES:**

- 1). This site is zoned MU-N and is classified as IES Lighting Zone 2 which allows for a total site lumen limit of 2.5 lumens per square foot of hardscape using the Hardscape Area Method of the Prescriptive Method of Regulatory Compliance. 14,739 s.f. of hardscape x 2.5 lumens plus an additional allowance of 4,000 lumens for the drive-up window per section 6.2.9.C.2 equals an allowable lumen level of 40,847. This site is in lumen compliance with a total of 39,962.34 lumens."
- 2). Photocells shall be provided that automatically extinguish all outdoor lighting when sufficient daylight is available. A timer shall be provided to reduce the total outdoor lighting lumens by at least thirty percent (30%) from one (1) hour after business closing to one (1) hour before business opening.
- 3). The illuminated drive-thru sign will require a separate permit.
- 4). Lighting photometric calculations are an estimate of light levels. Site conditions may alter the levels indicated on this plan.
- 5). Light fixture symbols are diagrammatic and shown for clarity. Refer to the fixture cut sheets for actual fixture dimensions and more detailed information.



1 LIGHTING PLAN

SCALE: 1/8" = 1'-0"

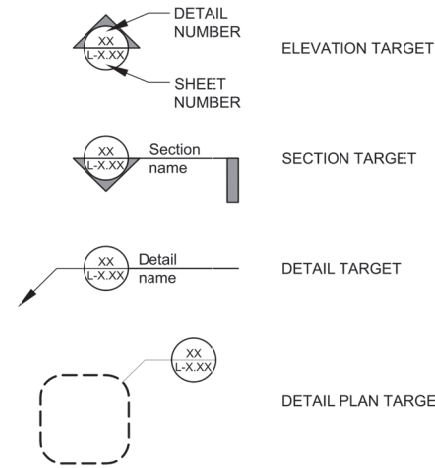
14,739 S.F. OF HARDSCAPE

Plan View  
Scale: 1" = 10'

**ABBREVIATIONS**

&	And	MACH	Machine
@	At	MATL	Material
AD	Area Drain	MAX	Maximum
ADJ	Adjacent Finish	MECH	Mechanical
AFF	Above Finished Floor	MED	Medium
ALS	Acrylic Latex Sealant	MFR	Manufacturer
ALUM	Aluminum	MH	Manhole
ANOD	Anodized	MIN	Minimum
AP	Access Panel	MISC	Miscellaneous
APPROX	Approximately	MO	Masonry Opening
ARCH	Architectural	MTL	Metal
B-B	Back to Back	NIC	Not In Contract
BC	Bottom of Curb	NO	Number
BJF	Bituminous Joint Filler	NOM	Nominal
BLK	Block (Wood Blocking)	NTS	Not To Scale
BMT	Butylmastic Tape Sealant		
BRK	Brick	OA	Overall
BRS	Butyl Rubber Sealant	OC	On Center
BW	Bottom of Wall	OD	Outside Diameter
C/C	Center to Center	OPNG	Opening
CB	Catch Basin	OPP	Opposite
CJ	Cold Joint		
CJF	Cork Joint Filler	PA	Planting Area
CL	Center Line	PC	Pool Coping
CLR	Clear Opening	PCC	Portland Cement Concrete
COL	Column	PERP	Perpendicular
CONC	Concrete	PLBG	Plumbing
CONCP	Concrete Painted	PLWD	Plywood
CONST	Construction	POB	Point of Beginning
CONTR	Contractor	PR	Pair
CONT	Continuous	PREFAB	Prefabricated
CMU	Concrete Masonry Unit	PSF	Pounds Per Square Foot
CMUP	Concrete Masonry Unit Painted	PSI	Pounds Per Square Inch
CO	Clean Out	2-PUMS	Polyurethane Sealant (Two Part)
DF	Drinking Fountain	PTD	Painted Finish
DI	Ductile Iron	QTY	Quantity
DIA	Diameter		
DIM	Dimension	R	Radius
DN	Down	RD	Roof Drain
DTL	Detail	REF	Reference
DWG	Drawing	REINF	Reinforced
EA	Each	REQ'D	Required
EC	Exposed Construction	REV	Revision
ECP	Exposed Construction Painted	RM	Room
EFTS	Expanding Foam Tape Sealant	RO	Rough Opening
EL	Elevation		
EJ	Expansion Joint	SE	Steel Edge
EQ	Equal	SECT	Section
EX	Existing	SHT	Sheet
FFE	Finished Floor Elevation	SIM	Similar
FG	Finished Grade	SPEC	Specification
GA	Gauge	SQ	Square
GALV	Galvanized	SS	Stainless Steel
GB	Glazed Block	SRS	Silicone Rubber Sealant
GC	General Contractor	ST	Sealant Tape
GL	Glass	STD	Standard
GRND	Ground	STL	Steel
G	Gutter	STOR	Storage
HDW	Hardware	STRUCT	Structural
HNGG	Hollow Neoprene Compression Gasket	SUSP	Suspended
HORIZ	Horizontal		
HM	Hollow Metal	T	Tread
HP	High Point	T/	Top Of
HR	Hours	TC	Top of Curb
HT	Height	TEL	Telephone
IV	Invert	TF	Top of Frame
ID	Inside Diameter	THK	Thick
IN	Inch	TC	Top of Curb
INLET	Drain Inlet	TP	Top of Pavement
INFO	Information	TS	Top of Step
INSUL	Insulation	TT	Traffic Topping
INT	Interior	TW	Top of Wall
LAM	Laminated	TYP	Typical
LBS, #	Pounds	UNO	Unless Noted Otherwise
LP	Low Point	VERT	Vertical
		VIF	Verify in Field
		W/	With
		W/O	Without
		WC	Water Closet
		WD	Wood
		WP	Work Point
		WPR	Waterproofing
		WT	Weight

**ANNOTATIONS**



**MATERIAL SYMBOLS - DETAILS AND SECTIONS**

SOIL AND SUBGRADE MATERIALS	CONSTRUCTION MATERIALS
PLANTING SOIL / AMENDED TOPSOIL	CONCRETE
TOPSOIL / CLEAN FILL CAP	ASPHALT
UNDISTURBED SUBGRADE	GRANITE
COMPACTED SUBGRADE / SOIL	LIMESTONE
STRUCTURAL SOIL	PRECAST CONCRETE
GRAVEL / GRANULAR FILL	CONCRETE MASONRY UNIT
	BRICK
	MORTAR SETTING BED
<b>MISCELLANEOUS</b>	SAND
ROOT PATHS	
MEMBRANE	
BACKER ROD / GASKET	
RIGID INSULATION	

**GENERAL NOTES:**

- 1.) Locate and verify the condition of existing utilities prior to excavation. Take responsibility of contacting line location services and any cost incurred for bodily injury and / or damage of owner's property or said utilities.
- 2.) The landscape architect shall be notified by the contractor of any discrepancies discovered between the contract documents and actual site conditions before proceeding with the work. The contractor shall be liable for all modifications and damages if work proceeds without this notification.
- 3.) The contractor is responsible for all aspects of maintaining a safe work site including, but not limited to, providing for traffic control, installation and placement of fencing and barricades, excavation and trench protection, and compliance with all federal and local regulations and codes. All safety exposures or violations shall be rectified immediately.
- 4.) The contractor is responsible for protection of all existing improvements both on site and adjacent to the work site and shall repair any damage to these improvements to the satisfaction of the owner.
- 5.) The contractor shall notify the owner and the landscape architect 48 hours prior to commencement of work to coordinate project inspection schedules.
- 6.) Any alternates and or substitutions proposed by the contractor shall be submitted to the landscape architect for approval. Changes to the scope of work and / or contract documents resulting from the acceptance of the contractor's alternates and / or substitutions shall be the responsibility of the contractor.
- 7.) The contractor is responsible for removal of trash on a daily basis.
- 8.) The contractor shall comply with all applicable codes, regulations and ordinances. Prior to construction, all permits and approvals required for construction of the project shall be paid for and obtained by the contractor (plan review fees are paid by owner) costs for permits shall be included in the bid. It is the contractor's responsibility to become aware of required inspections that are associated with permits issued for the work and to schedule these inspections at the appropriate stage of construction. Examples include but are not limited to rough-in electrical, rough-in plumbing, irrigation piping, foundation steel for structures (including walls), fire inspections related to entry gates and associated structures any required special inspections and others as may apply.
- 9.) Coordinate work with subcontractors to accomplish the scope of work as shown and noted in the contract documents, as well as coordinate construction with other contractors working on the site.
- 10.) The contractor shall coordinate the storing of materials, parking of vehicles, and restrictions of work and access with the owner. Under no circumstances shall any contractor store materials, park vehicles or equipment under the canopy of existing trees.
- 11.) Unless specified otherwise, the contractor is responsible for providing and paying all temporary utilities and services necessary to completely install all work as shown and noted in the contract documents.
- 12.) The contractor is responsible for providing and servicing temporary toilet facilities.
- 13.) The contractor is responsible for the legal off-site disposal of surplus material and debris.
- 14.) Upon completion of construction and prior to final approval, the contractor shall thoroughly clean the project site of all trash, repair all damage to finish grade, including tailings from excavations, wheel ruts and any settling or erosion that has occurred prior to completion. All areas of the project site shall be left in a neat and presentable condition satisfactory to the owner prior to submittal of the final payment.
- 15.) Contractor is responsible for providing and paying for all water and electricity required for construction. Owner will order and pay for permanent water and electrical services.
- 16.) The contractor shall prepare & keep current, for the landscape architects' review, a schedule of submittals which is coordinated w/ the contractor's construction schedule and allows the landscape architect reasonable time to review submittals. Submittals include but are not limited to shop drawings, material selections, plant photos with measuring device included in image.



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PROJECT

**Starbucks Bee Cave**

14211 W. Highway 71  
Bee Cave, Texas 78738



ISSUED  
March 13, 2024  
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GENERAL NOTES

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36 OF 41 SHEET NUMBER  
**L0.01**  
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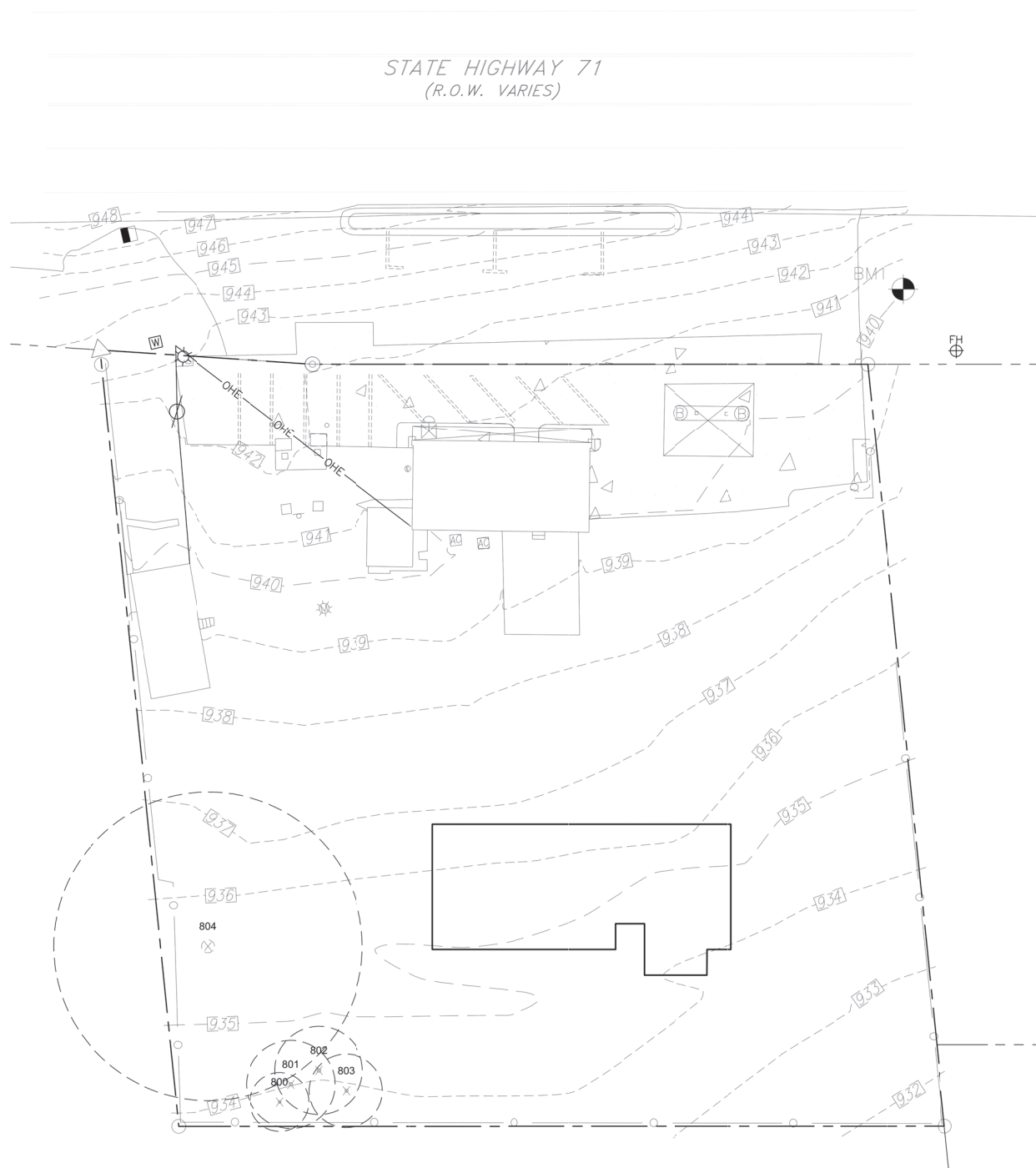
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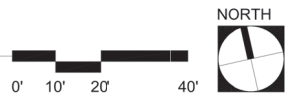
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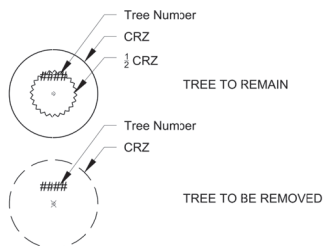
EXISTING TREE PLAN



**1** EXISTING TREE PLAN  
1" = 20'



EXISTING TREE LEGEND



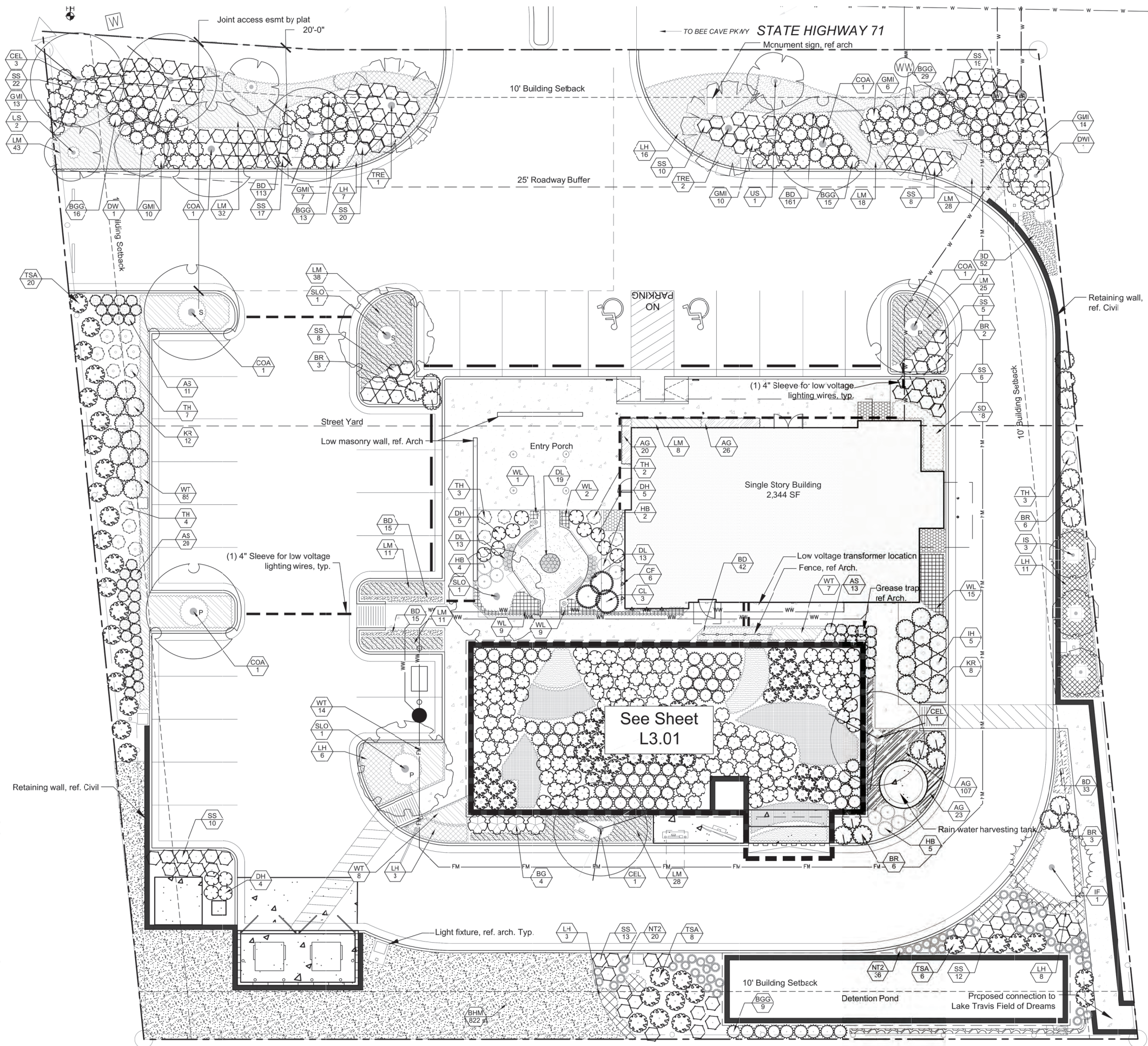
EXISTING TREE SCHEDULE

HERITAGE MULTI-TRUNK TAG#	To Remove Invasive	SPECIES	CAL 1	CAL 2
800	x	Live Oak	8	
x 801	x	Live Oak	9	6
802	x	Live Oak	12	
803	x	Live Oak	10	
x 804	x	Cedar	42	

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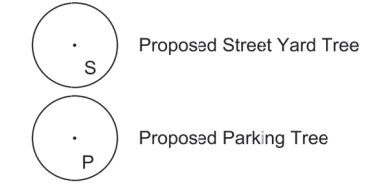


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PLANT LEGEND, REF. L3.03 FOR FULL SCHEDULE

PLANT LEGEND	
DECIDUOUS TREES	BOTANICAL / COMMON NAME
TRE	Cercis canadensis 'texensis' Texas Redbud
DWI	Chilopsis linearis Desert Willow
COA	Quercus muehlenbergii Chinkapin Oak
CEL	Ulmus crassifolia Cedar Elm
US	Ungnadia speciosa Mexican Buckeye
EVERGREEN TREES	BOTANICAL / COMMON NAME
IF	Ilex x attenuata 'Fosteri' Foster's Holly
IS	Ilex x attenuata 'Savannah' Savannah Holly
CL	Prunus caroliniana 'Vonus' Bright 'N Tight Carolina Laurel Cherry
SLO	Quercus virginiana Southern Live Oak
DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
CF	Ficus pumila Creeping Fig
DH	Ilex vomitoria 'Nana' Dwarf Yaupon Holly
TSA	Leucophyllum frutescens Texas Sage
IH	Rhaphiolepis indica Indian Hawthorn
BR	Rosmarinus officinalis 'Upright Blue' Upright Blue Rosemary
SS	Scutellaria sulfrutescens Pink Skullcap
BG	Teucrium fruticosum 'Azureum' Azure Bush Germander
ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass
NT2	Nassella tenuissima Mexican Feather Grass
PERENNIALS	BOTANICAL / COMMON NAME
GMI	Conoclinium greggii Gregg's Mistflower
DL	Hemerocallis x 'Stella de Oro' Stella de Oro Daylily
HB	Nandina domestica 'Firepower' Firepower Heavenly Bamboo
KR	Rosa x 'Radrazz' TM Knock Out Shrub Rose
AS	Salvia greggii Autumn Sage
SEMI-EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
TH	Thryallis glauca Thryallis
EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
SD	Dichondra argentea Silver Dichondra
LM	Liriope muscari Lilyturf
BD	Melampodium leucarthum Blackfoot Daisy
AG	Ophiopogon intermedius Aztec Grass
NATIVE SEED MIX	BOTANICAL / COMMON NAME
BHM	Bee Happy Mix Native American Seed
ORNAMENTAL GRASS	BOTANICAL / COMMON NAME
TSE	Carex texensis Texas Sedge
PERENNIAL GROUNDCOVER	BOTANICAL / COMMON NAME
WT	Stemodia lanata Gray Woolly Twintip
SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
WL	Lantana montevidensis 'Alba' White Trailing Lantana
LH	Lantana x 'New Gold' New Gold Lantana



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PROJECT  
**Starbucks Bee Cave**  
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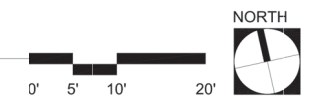
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LANDSCAPE PLAN

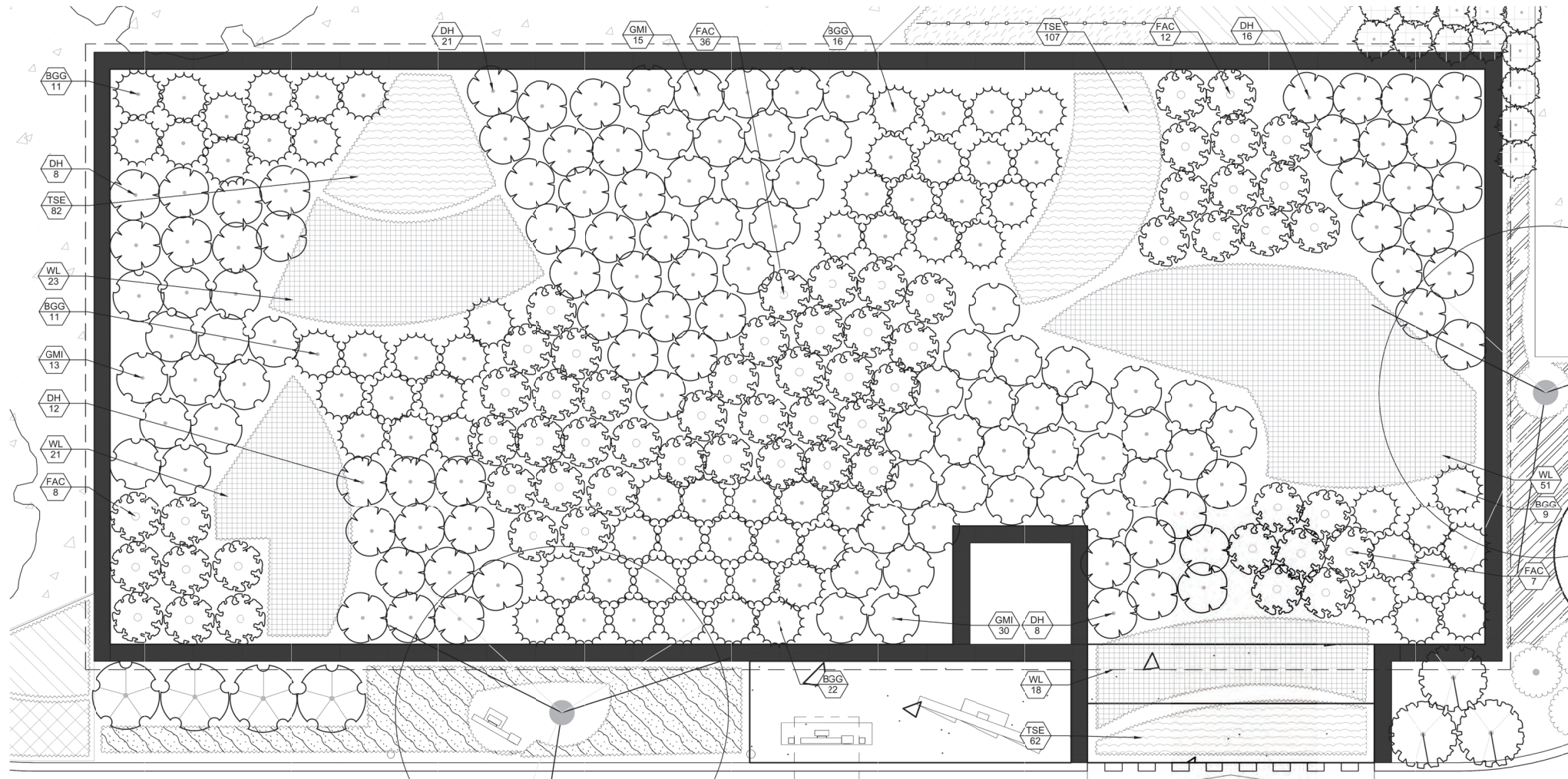
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1 LANDSCAPE PLAN  
1" = 10'

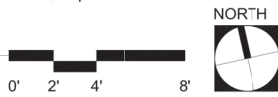


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J:\Projects\Austin\Investor\Starbucks Bee Cave\05 Drawings and Production\1100 CAD\00 Current\13 Planting.dwg



1 RAIN GARDEN ENLARGEMENT  
1" = 4'



PLANT LEGEND, REF. L3.03 FOR FULL SCHEDULE

PLANT LEGEND RAIN GARDEN	
DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
DH	Ilex vomitoria 'Nana' Dwarf Yaupon Holly
ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass
PERENNIALS	BOTANICAL / COMMON NAME
GMI	Conoclinium greggii Gregg's Mistflower
ORNAMENTAL GRASS	BOTANICAL / COMMON NAME
TSE	Carex texensis Texas Sedge
SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
WL	Lantana montevidensis 'Alba' White Trailing Lantana

Filtration Basin 2714 sq. ft. x 0.20 = 543 plants required				
Plant	Size	Spacing	Quantity	1 gallon equivalent
Flame Acanthus	5 Gal	36" O.C.	63	252
Dwarf Yaupon Holly	5 Gal	36" O.C.	65	260
Blonde Ambition Blue Grama Grass	5 Gal	36" O.C.	69	276
Gregg's Mistflower	5 Gal	24" O.C.	59	236
Texas Sedge	1 Gal	24" O.C.	251	251
White Trailing Lantana	3 Gal	48" O.C.	113	226
			TOTAL	1501



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Bee Cave**

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SHEET TITLE

LANDSCAPE PLAN

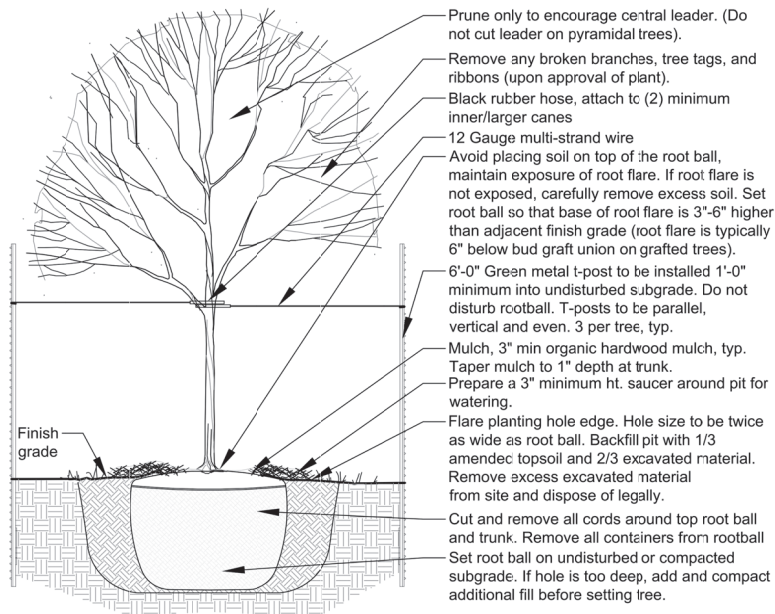
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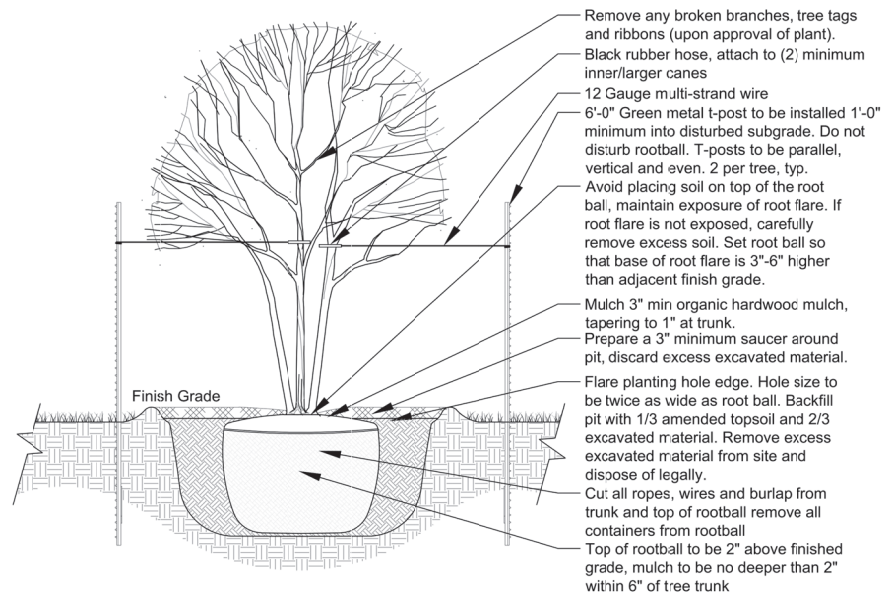
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41

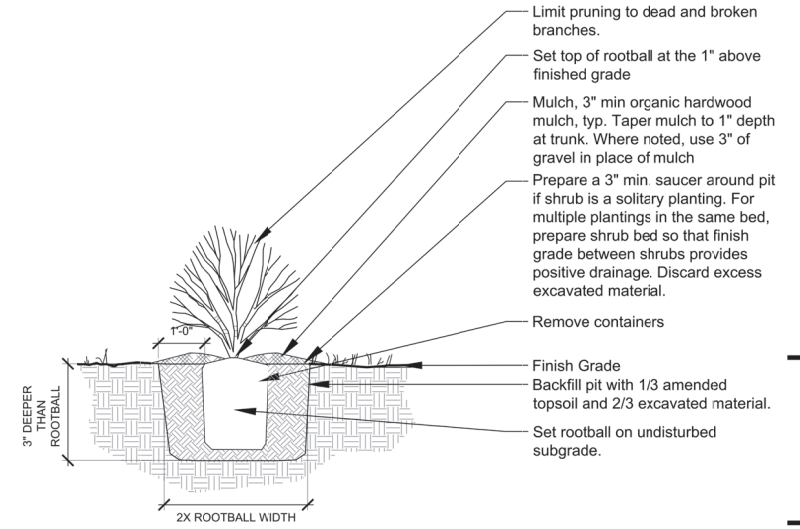
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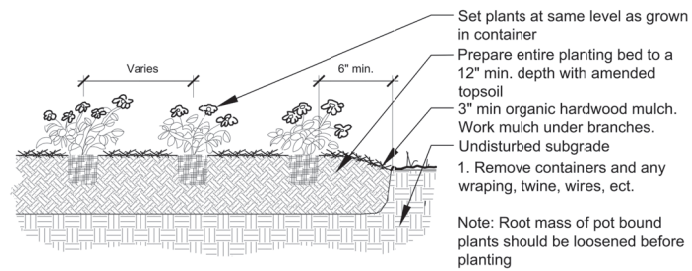
1 SHADE TREE  
1/2" = 1'-0"



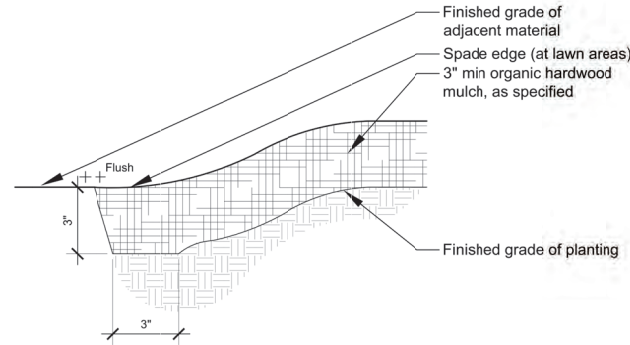
2 ORNAMENTAL TREE PLANTING  
1/2" = 1'-0"



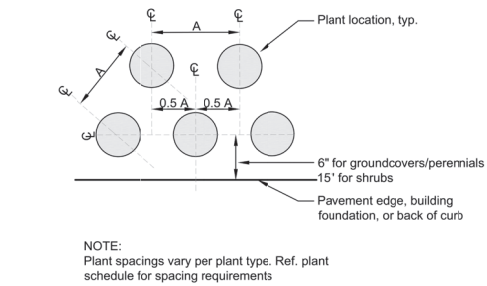
3 SHRUB PLANTING  
1/2" = 1'-0"



4 PERENNIAL PLANTING  
1/2" = 1'-0"



5 MULCH TRENCH  
3" = 1'-0"



6 TRIANGULAR PLANT SPACING  
NOT TO SCALE



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PLANTING DETAILS

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**L3.02**  
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**PLANTING NOTES**

- Contractor shall receive site at approximately final grade. Any exceptions will be documented in the construction documents. The landscape contractor shall fill area around walls per typical wall section, plan, and landscape grading notes with backfill provided by contractor. All slopes shall be smooth and uniform with a maximum slope of 3:1 unless otherwise noted. Tie into existing adjacent grades smoothly and fine grade for positive drainage and prevent water from standing. Cut swales to direct water away from all structures and property lines and towards storm sewer inlets. Do not drain any water towards lots or easements. Final location and height of sumps to be approved by Hitchcock Design Group (HDG) in the field. Provide a minimum of 8" of granular fill wrapped in filter fabric behind walls and to a depth below weeps holes to allow for proper drainage (reference typical wall section, planting detail sheet).
- Shrub Beds: Reference specification and details for planting requirements, materials, and execution, including plant pit dimensions and backfill requirements. Shrubs and groundcovers to be triangularly spaced (spacing per plans and plant list). Ryerson 3/16" x 4" steel edging (dark green) shall be installed to separate all beds from turf areas. Reference planting bed detail for drainage requirement of all beds occurring directly at the back of curb. Backfill all shrub pits with specified planting mix. Incorporate 5 lbs of 13-13-13 fertilizer per cubic yard of mix into all planting beds. All beds shall receive a minimum of 3" deep organic hardwood mulch.
- Tree Planting: Reference specifications and details for planting requirements, materials, and execution, including staking methods, plant pit dimensions, and backfill requirements. Guy all trees 4" in caliper and greater and stake all trees smaller than 4" in caliper unless machine moved. Stake all machine moved trees with three (3) metal "T" stakes per detail. Backfill all shrub pits with specified planting mix. Incorporate 5 lbs of 13-13-13 fertilizer per cubic yard of mix into all planting beds. All beds shall receive a minimum of 3" deep organic hardwood mulch.
- Machine Moved Trees: All trees to be machine moved directly from grower shall be approved by HDG prior to relocation. Coordinate tree pruning to balance root loss with HDG. Trees to be mechanically transplanted using tree spade allowing 9" rootball per caliper inch of tree. Set tree straight and plumb and fill any air spaces around tree with specified sand or sandy loam topsoil, water in to displace air pockets. Install 3" high water retention basin per specifications with 3" deep organic mulch and water spaced trees the day of transplanting.
- Trees shall be located a minimum of 5'-0" from walls, overheads, walks, edging, curbs and other trees within the project. If conflicts arise between size of areas and plans, contractor to contact HDG for resolution. Failure to make such conflicts known to HDG may result in contractor's liability to relocate materials.
- All plant materials shall be approved by HDG prior to installation. Final location of all plant material shall be subject to the approval of HDG. Contractor shall notify HDG 48 hours prior to commencement of work to coordinate project inspection schedules.
- Lawn Installation: Prior to application of hydromulch, contractor shall apply contact herbicide (recommended mixture of Image and Roundup) to remove all existing weeds as necessary, scarify existing soil to specified depths. Remove all lumps, clods, trash, and sticks greater than 1". Fine grade to provide positive drainage and smooth lawn areas and cut swales as necessary to ensure no ponding of water. Lay specified sod strip along the back of curb and hydromulch per specifications within approximate limits shown on plans. Finished grade of lawn and planting areas to be minimum 1/2" below finished grade of adjacent pavement.

**IRRIGATION NOTES**

Automatic irrigation systems shall comply with TCEQ Chapter 34c, as well as the following requirements:

- These requirements shall be noted on the Site Development Permit and shall be implemented as part of the landscape inspection:
  - The system must provide a moisture level adequate to sustain growth of the plant materials;
  - The system does not include spray irrigation on areas less than ten (10) feet wide (such as medians, buffer strips, and parking lot islands);
  - Circuit remote control valves have adjustable flow controls;
  - Serviceable in-head check valves area adjacent to paved areas where elevation differences may cause low head drainage;
  - A master valve installed on the discharge side of the backflow preventer;
  - Above-ground irrigation emission devices are set back at least six (6) inches from impervious surfaces;
  - An automatic rain shut-off device shuts off the irrigation system automatically after more than a one-half inch (1/2") rainfall; and
  - Newly planted trees shall have permanent irrigation consisting of drip or bubblers.
- The irrigation installer shall develop and provide an as-built design plan to the City at the time the final irrigation inspection is performed:
  - Unless fiscal security is provided to the City for the installation of the system, it must be operational at the time of the final landscape inspection.
- The irrigation installer shall also provide exhibits to be permanently installed inside or attached to the irrigation controller, including:
  - A laminated copy of the water budget containing zone numbers, precipitation rate, gallons per minute and the location of the isolation valve; and an as-built plan.

**SOIL CONDITIONING AND MULCHING**

- A minimum of 3 inches of organic mulch shall be added in non-turf areas to the soil surface after planting.
- Non-porous material such as sheet plastic shall not be placed under the mulch.
- A minimum of 6" permeable soil, native or imported and meeting the requirements of Standard Specification 601S, shall be required for turf and landscaped areas.
- Tree planting areas are to be provided with a minimum of 12 inches of friable native loam soil meeting the requirements of Standard Specification 601S. Planting in relatively undisturbed existing native soils is encouraged. Soil to a minimum depth of 12 inches is required within the entire landscape median or peninsula. All other planting areas must have a minimum soil depth of 12 inches within a radius of six feet from the tree trunk. Trees are not to be planted in cache, solid rock, or, in soils whose texture has been compacted by construction equipment. Areas of compaction which have been subsequently amended with 12 inches of friable native soil are suitable for planting.

**REMEDIAL TREE CARE NOTES AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS**

- Preserved trees within the limits of construction may require soil aeration and supplemental nutrients. Soil and/or foliar analysis should be used to determine the need for supplemental nutrients. The City Arborist may require these analyses as part of a comprehensive tree care plan. Soil pH shall be considered when determining the fertilization composition as soil pH influences the tree's ability to uptake nutrients from the soil. If analyses indicate the need for supplemental nutrients, then humate/nutrient solutions with mycorrhizae components are highly recommended. In addition, soil analysis may be needed to determine if organic material or beneficial microorganisms are needed to improve soil health. Materials and methods are to be approved by the City Arborist (512-974-1876) prior to application. The owner or general contractor shall select a fertilization contractor and ensure coordination with the City Arborist.
- Pre-construction treatment should be applied in the appropriate season, ideally the season preceding the proposed construction. Minimally, areas to be treated include the entire critical root zone of trees as depicted on the City approved plans. Treatment should include, but not limited to, fertilization, soil treatment, mulching, and proper pruning.
- Post-construction treatment should occur during final revegetation or as determined by a qualified arborist after construction. Construction activities often result in a reduction in soil macro and micro pores and an increase in soil bulk density. To ameliorate the degraded soil conditions, aeration via water and/or air injected into the soil is needed or by other methods as approved by the City Arborist. The proposed nutrient mix specifications and soil and/or foliar analysis results need to be provided to and approved by the City Arborist prior to application. Construction which will be completed in less than 90 days may use materials at 1/2 recommended rates. Alternative organic fertilizer materials are acceptable when approved by the City Arborist.

**TREE & NATURAL AREA PROTECTION**

- All trees and natural areas shown on plan to be preserved shall be protected during construction with temporary fencing.
- Protective fences shall be erected according to City of Bee Cave Standards for Tree Protection.
- Protective fences shall be installed prior to the start of any site preparation work (clearing, grubbing or grading), and shall be maintained throughout all phases of the construction project.
- Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in soil build-up within tree drip lines.
- Protective fences shall surround the trees or group of trees, and will be located at the outermost limit of branches (drip line), for natural areas, protective fences shall follow the Limit of Construction line, in order to prevent the following:
  - Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;
  - Root zone disturbances due to grade changes (greater than 6 inches cut or fill), or trenching not reviewed and authorized by the City Arborist;
  - Wounds to exposed roots, trunk or limbs by mechanical equipment;
  - Other activities detrimental to trees such as chemical storage, cement truck cleaning, and fires.
- Exceptions to installing fences at tree drip lines may be permitted in the following cases:
  - Where there is to be an approved grade change, impermeable paving surface, tree well, or other such site development, erect the fence approximately 2 to 4 feet beyond the area disturbed;
  - Where permeable paving is to be installed within a tree's drip line, erect the fence at the outer limits of the permeable paving area (prior to site grading so that this area is graded separately prior to paving installation to minimize root damage);
  - Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the building;
  - Where there are severe space constraints due to tract size or other special requirements, contact the City Arborist to discuss alternatives.

Special Note: For the protection of natural areas, no exceptions to installing fences at the Limit of Construction line will be permitted.

- Where any of the above exceptions result in a fence being closer than 4 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 8 ft. (or to the limits of lower branching) in addition to the reduced fencing provided.
- Trees approved for removal shall be removed in a manner which does not impact trees to be preserved.
- Any roots exposed by construction activity shall be pruned flush with the soil. Backfill root areas with good quality top soil as soon as possible. If exposed root areas are not backfilled within 2 days, cover them with organic material in a manner which reduces soil temperature and minimizes water loss due to evaporation.
- Any trenching required for the installation of landscape irrigation shall be placed as far from existing tree trunks as possible.
- No landscape topsoil dressing greater than 4 inches shall be permitted within the drip line of trees. No soil is permitted on the root flare of any tree.
- Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs (ripping of branches, etc.).
- All finished pruning shall be done according to recognized, approved standards of the industry (Reference the National Arborist Association Pruning Standards for Shade Trees available on request from the City Arborist).
- Deviations from the above notes may be considered ordinance violations if there is substantial non-compliance or if a tree sustains damage as a result.

**SPECIAL CONSTRUCTION TECHNIQUES**

- Prior to excavation within tree driplines or removal of trees adjacent to other trees that are to remain, make a clean cut between the disturbed and undisturbed root zones with a rock saw or similar equipment to minimize root damage.
- In critical root zone areas that cannot be protected during construction with fencing and where heavy vehicular traffic is anticipated, cover those areas with a minimum of 12 inches of organic mulch to minimize soil compaction. In areas with high soil plasticity Geotextile fabric, per standard specification 620S, should be placed under the mulch to prevent excessive mixing of soil and mulch. Additionally, material such as plywood and metal sheets, could be required by the City Arborist to minimize root impacts from heavy equipment. Once the project is completed, all materials should be removed, and the mulch should be reduced to a depth of 3 inches.
- Perform all grading within critical root zone areas by hand or with small equipment to minimize root damage.
- Water all trees most heavily impacted by construction activities deeply once a week during periods of hot, dry weather. Spray tree crowns with water periodically to reduce dust accumulation on the leaves.
- When installing concrete adjacent to the root zone of a tree, use a plastic vapor barrier behind the concrete to prohibit leaching of lime into the soil.

**VERTICAL CLEARANCE NOTES**

- All trees to be limbed up to provide a minimum vertical clearance of 80" (in) along accessible route.
- For all drive ways and internal circulations areas on site where fire department access is required, a minimum clearance of 14' (ft) is required.

HEIGHT	MULTI TRUNK	TAG#	To Remove Invasive	SPECIES	CAL 1	CAL 2	CAL 3	CAL 4	CAL 5
				Live Oak	8				
x	801	x		Live Oak	9	6			
	802	x		Live Oak	12				
	803	x		Live Oak	10				
x	804	x		Cedar	42				
Total caliper: inch removed					87				

HW 71 Buffer: 25'		
134.8 LF of street frontage	Req	Provided
6 3" trees per 100 LF*	8	8
3 4" trees per 100 LF*	4	4
<b>Total</b>	<b>12</b>	<b>12</b>

Street Yard Landscape Requirements		
1,678 SF Total Street Yard	Req	Provided
20% landscape area	2336	1710
1 tree per 1,000 SF	2	2

Parking Lot Landscape		
7654 SF Parking Area	Req	Provided
25% minimum shaded SF	1914	2326

Parking Area Shade Calculation			
	Shaded Area	Quantity	Total SF
<i>Quercus muhlenbergii</i>	Chinquapin Oak	942	1 942
<i>Quercus virginiana</i>	Live Oak	942	2 1884
			<b>total 2826</b>

5' Landscape Buffer			
196 LF Building Perimeter			
	Required	980 SF	
	112 LF	Provided	560 SF 57%
	Alternative Compliance Provided*		579 SF 59%
	1 tree per 1,000 SF	1 required	1 provided
*Alternative compliance provided via planted area adjacent to entry porch.			

**PLANT SCHEDULE**

DECIDUOUS TREES	BOTANICAL / COMMON NAME	CONTAINER	CALIPER	HEIGHT
TRE	<i>Cercis canadensis</i> 'texensis' Texas Redbud	45 gal	3"-6" Cal.	12'
DWI	<i>Chilopsis linearis</i> Desert Willow	95 gal	3"	7' - 9'
COA	<i>Quercus muehlenbergii</i> Chinquapin Oak	100 gal	4"	16'
CEL	<i>Ulmus crassifolia</i> Cedar Elm	100 gal	4"	16'
US	<i>Ungnadia speciosa</i> Mexican Buckeye	95 gal	3"	8' - 9'

EVERGREEN TREES	BOTANICAL / COMMON NAME	CONTAINER	CALIPER	HEIGHT
IF	<i>Ilex x attenuata</i> 'Fosteri' Foster's Holly	30 gal	2" Cal.	7'
IS	<i>Ilex x attenuata</i> 'Savannah' Savannah Holly	45 gal	3"-6" Cal.	12'
CL	<i>Prunus caroliniana</i> 'Monus' Bright 'N Tight Carolina Laurel Cherry	30 gal	2" Cal.	7'
SLO	<i>Quercus virginiana</i> Southern Live Oak	100 gal	3"-4" Cal.	16'

DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
FAC	<i>Anisacanthus quadrifidus wrightii</i> Flame Acanthus	5 gal	16"-18"	36" O.C.

EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
CF	<i>Ficus pumila</i> Creeping Fig	3 gal	10"	36" O.C.
DH	<i>Ilex vomitoria</i> 'Nana' Dwarf Yaupon Holly	5 gal	48"	36" O.C.
TSA	<i>Leucophyllum frutescens</i> Texas Sage	7 gal	14"	48" O.C.
IH	<i>Rhaphiolepis indica</i> Indian Hawthorn	7 gal	14"	36" O.C.
BR	<i>Roemeria officinalis</i> 'Upright Blue' Upright Blue Rosemary	5 gal	12"	36" O.C.
SS	<i>Scutellaria suffrutescens</i> Pink Skullcap	1 gal	6"	36" O.C.
BG	<i>Teucrium fruticosum</i> 'Azureum' Azure Bush Germander	5 gal	12"	48" O.C.

ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
BGG	<i> Bouteloua gracilis</i> 'Blonde Ambition' Blonde Ambition Blue Grama Grass	5 gal	36"	24" O.C.
NT2	<i>Nassella tenuissima</i> Mexican Feather Grass	7 gal	14"	24" O.C.

PERENNIALS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
GMI	<i>Conoclinium greggii</i> Gregg's Mistflower	5 gal	24"	24" O.C.
DL	<i>Hemerocallis x 'Stella de Oro'</i> Stella de Oro Daylily	5 gal	12"	12" O.C.
HB	<i>Nandina domestica</i> 'Firepower' Firepower Heavenly Bamboo	7 gal	14"	36" O.C.
KR	Rosa x 'Radrazz' TM Knock Out Shrub Rose	10 gal	17"	48" O.C.
AS	<i>Salvia greggii</i> Autumn Sage	5 gal	12"	48" O.C.

SEMI-EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
TH	<i>Thryallis glauca</i> Thryallis	15 gal	3'	36" O.C.

EVERGREEN GROUND COVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
SD	<i>Dichondra argentea</i> Silver Dichondra	1 gal	6"	24" O.C.
LM	<i>Liriope muscari</i> Lilyturf	5 gal	12"	24" O.C.
BD	<i>Melampodium leucanthum</i> Blackfoot Daisy	3 gal	10"	12" O.C.
AG	<i>Ophiopogon intermedius</i> Aztec Grass	3 gal	10"	12" O.C.

NATIVE SEED MIX	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
BHM	Bee Happy Mix Native American Seed	seed		

ORNAMENTAL GRASS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
TSE	<i>Carex texensis</i> Texas Sedge	1 gal	12"-15"	10" O.C.

PERENNIAL GROUND COVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
WT	<i>Stemodia lanata</i> Gray Woolly Twintip	1 gal	6"	24" O.C.

SEMI-EVERGREEN GROUND COVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
WL	<i>Lantana montevidensis</i> 'Alba' White Trailing Lantana	3 gal	10"	24" O.C.
LH	<i>Lantana x 'New Gold'</i> New Gold Lantana	3 gal	10"	48" O.C.



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ISSUED  
March 13, 2024  
REVISIONS

No	Date	Issue

CHECKED BY  
BW

DRAWN BY  
JB & MP

SHEET TITLE

**PLANTING NOTES & TABLES**

41 OF 41 SHEET NUMBER  
**L3.03**  
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NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

**EXHIBIT "B"**  
**QUEUING PLAN**

**Figure 8: Queue Stacking Capacity**

